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AFSC
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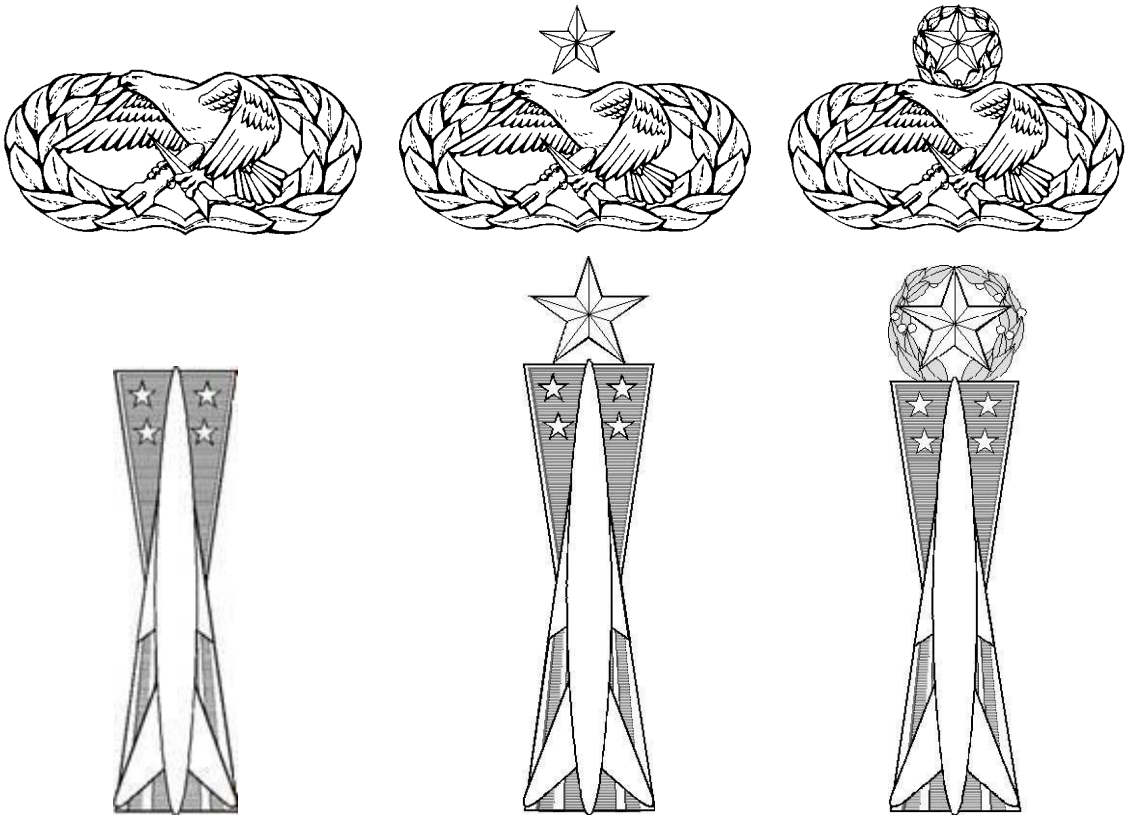
MISSILE AND SPACE SYSTEMS MAINTENANCE



BASIC SENIOR MASTER

CAREER FIELD EDUCATION AND TRAINING PLAN

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CAREER FIELD EDUCATION TRAINING PLAN
MISSILE AND SPACE SYSTEMS MAINTENANCE
AFSC 2M0X2

Table of Contents

PREFACE

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life cycle education and training requirements, training support resources, and minimum core task requirements for the 2M0X2, Missile and Space Systems Maintenance specialty. The CFETP provides personnel a clear career path to success and instills rigor in all aspects of career field training. This CFETP does not apply to uniformed members of the United States Space Force (USSF), Air National Guard (ANG), or Air Force Reserve (AFR).

2. The CFETP consists of two parts: supervisors plan, manage, and control training within the 2M0X2 career field using both parts of the plan.

2.1. Part I provides information necessary for overall management of training in the career field. **Section A** explains how individuals will use the plan; **Section B** identifies career progression information, duties and responsibilities, training strategies, and career field path; **Section C** associates each level with specialty qualifications (knowledge, education, experience, training, and other); and **Section D** indicates training resource constraints. Some examples are: funds, manpower, equipment, and facilities. **Section E** identifies transition training guide requirements for Staff Sergeant through Master Sergeant (not used).

2.2. At unit level, supervisors and trainers use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan. Part II includes the following: **Section A** identifies the Specialty Training Standard (STS) and includes duties, tasks, and technical references to support training, Air Education and Training Command (AETC)-conducted training, core task and correspondence course requirements. **Section B** contains the Course Objective list and training standards supervisors use to determine if Airmen satisfied training requirements. **Section C** identifies available on-the-job training (OJT) support materials. An example is a Qualification Training Package, which may be developed to support proficiency training. **Section D** identifies a training course index supervisors can use to determine resources available to support training. **Section E** can be used to identify Major Command (MAJCOM) or Field Command (FIELDCOM) unique training requirements supervisors can use to determine additional training required for the associated qualification needs.

3. Using guidance provided in the CFETP ensures individuals in this specialty receive effective and efficient training at the appropriate points in their career. This plan enables us to train today's work force for tomorrow's jobs.

PART I

Section A - GENERAL INFORMATION

1. Purpose. This CFETP provides the information necessary for Air Force Career Field Managers, MAJCOM Functional Managers, commanders, training managers, supervisors, and trainers to plan, develop, manage and conduct an effective and efficient career field training program. The plan outlines the training individuals in the Missile and Space Systems Maintenance specialty should receive in order to develop and progress throughout their career. This plan identifies initial skills, upgrade, qualification, advanced, and continuation training. The CFETP has several purposes, some are:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.

1.2. Identifies task and knowledge training requirements for each skill level in the specialty and recommends education and training throughout each phase of an individual's career.

1.3. Lists training courses available in the specialty, identifies sources of training, and the training delivery method.

1.4. Identifies major resource constraints that impact full implementation of the desired career field training process.

2. Uses. The plan is used by MAJCOM Functional Managers and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual in the specialty.

2.1. AETC training personnel develop or revise formal resident, nonresident, field and exportable training based upon requirements established by the users and documented in Part II of the CFETP. They also work with the Air Force Career Field Manager to develop acquisition strategies for obtaining resources needed to provide the identified training.

2.2. MAJCOM Functional Managers ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. OJT, resident training, and contract training or exportable courses can satisfy identified requirements. Ensure MAJCOM-developed training to support this AFSC is identified for inclusion into the plan.

2.3. Each individual completes the mandatory training requirements specified in this plan. The list of courses in Part II is used as a reference to support training.

3. Coordination and Approval. The Air Force Career Field Manager is the approval authority. Also, the Air Force Career Field Manager will initiate an annual review of this document to ensure currency and accuracy. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. Using the list of courses in Part II, ensures elimination of duplicate training.

PART I

Section B - CAREER PROGRESSION AND INFORMATION

1. Specialty Descriptions. This section provides a description of the Missile and Space Systems Maintenance specialty and the duties and responsibilities performed within.

1.2. Specialty Summary. The Missile and Space Systems Maintenance specialty services and maintains, or supervises these actions, on missiles, space lift boosters, payloads, environmental blast doors and valves, associated subsystems, components, and support equipment (SE). Operates and maintains related equipment. Performs acquisition and activation activities. Related DoD Occupational Subgroup: 163200.

1.3. Duties and Responsibilities. The Missile and Space Systems Maintenance specialty:

1.3.1. Performs missile maintenance actions at support base, launch, launch control, and storage facilities, and ensures compliance with international treaties. Inspects, repairs, adjusts, and replaces, or supervises these actions, on components and subcomponents. Mechanically and electrically connects or disconnects reentry systems, guidance and control sections, missile stages, propulsion systems, and secondary ordnance devices at the launch facility. Prepares missile and launch facility for simulated launch and follow-on test and evaluation. Performs preventive maintenance inspections and electrical tests on missiles, missile components, launch and launch control facilities, support vehicles, hydraulic, pneudraulic, and pneumatic systems, and SE. Initiates unsatisfactory reports, failure reports, or proposed modifications. Performs intercontinental ballistic missile (ICBM) coding activities.

1.3.2. Coordinates and oversees activities of contractor personnel during space launch activities. Supervises loading, transportation, unloading, inspection, assembly, and hoisting of space lift boosters, payloads, component parts, and satellites at space launch facilities, and prepares space launch complexes, and erection and mating of space lift booster sections, payloads, and SE. Supervises or performs preventive maintenance inspections. Practices and supervises safety procedures when handling nitrogen, liquid fuels, oxidizers, and ordnance devices. Evaluates malfunctions and recommends corrective actions.

2. Skill and Career Progression. Adequate training and timely progression from the apprentice to the superintendent level play an important role in the Department of the Air Force's ability to accomplish its missions. It is essential that everyone involved in training do their part to plan, manage, and conduct an effective training program. The guidance provided in this part of the CFETP ensures each individual receives viable training at appropriate points in their career.

2.1. Apprentice Training (2M032). Initial skills training in this specialty consists of tasks and knowledge training provided in the Missile and Space Systems Maintenance Apprentice Course. Individuals must successfully complete this initial skills course to be awarded the 3-skill level.

2.2. Journeyman Training (2M052). Upgrade training to the 5-skill level in the Missile and Space Systems Maintenance specialty consists of: (1) completing the mandatory requirements identified in the Air Force Enlisted Classification Directory (AFECD), and AFI 36-2670, *Total Force Development*, (2) completing the knowledge training provided in the 2M052 Career Development Course (CDC), (3) obtaining

qualification on applicable weapon system and duty section 5-level core tasks identified in the Training Business Area (TBA) and (4) meeting time in training requirements identified in Section C. The applicable duty sections include Missile Maintenance Teams (MMT), Missile Handling Team (MHT), Survivable Systems Teams (SST), or Mechanical and Pneudraulics Section (MAPS). Upgrade training can be performed by a qualified shop trainer or by completing the AETC Field Training Detachment (FTD) courses to fulfill objectives. After award of the 5-skill level, continuation training, when available, should be utilized based on an individual's particular duty position or other needs.

2.3. Craftsman Training (2M072). Upgrade training to the 7-skill level in the Missile and Space Systems Maintenance specialty consists of: (1) completing the mandatory requirements in the AFECD and AFI 36-2670, (2) completing the in-resident Missile and Space Craftsman Course, (3) obtaining qualification on 7-level core tasks identified in TBA, and (4) meeting time in training requirements identified in Section C. After award of the 7-skill level, continuation training, when available, should be utilized based on an individual's particular training needs.

2.4. Superintendent Training (2M090). Upgrade training to the 9-skill level in the Missile and Space Systems Maintenance specialty consists of: (1) completion of the in-resident Senior Non-Commissioned Officer Academy and (2) promoting to Senior Master Sergeant.

3. Training Decisions. The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Missile and Space Systems Maintenance career field. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy should be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training. The training decision for skill level progression is recommended by the MAJCOM/FIELDCOM and AETC training personnel, with the final decision authority resting with the Air Force Career Field Manager.

3.1. Initial Skills. Initial skills (3-level) training is provided by AETC using the Missile and Space Systems Maintenance Apprentice Course. Completion of this course constitutes qualification on all 3-level core task requirements, unless course deviations are identified.

3.2. Journeyman Training (5-level). In order to successfully complete journeyman training and be awarded the 2M052 AFSC, personnel must first be awarded the 2M032 AFSC. Upon arrival to their unit of assignment, they are eligible to be enrolled in the 5-skill level upgrade training program. This starts the time-in-training countdown. They must also be qualified on all 5-level cores tasks identified in the STS for their assigned duty section and complete the 2M052 CDC. Once personnel have 12 months' time-in-training (9 months for retrainees) from enrollment and journeyman training has been completed, personnel are then awarded the 2M052 AFSC.

3.3. Craftsman Training (7-level). In order to successfully complete craftsman training and be awarded the 2M072 AFSC, personnel must complete journeyman training and have been awarded the 2M052 AFSC. Once they are given a promotion line number for Staff Sergeant, personnel are automatically enrolled in 7-level upgrade training, where the time-in-training countdown starts. Personnel must also be qualified on all 7-level core tasks identified in the STS for their assigned duty section, and complete the in-resident Missile and Space Craftsman Course. Once personnel have 12 months' time-in-training (6 months for retrainees) from enrollment and craftsman training has been completed, personnel are then awarded the 2M072 AFSC.

3.4. Superintendent Training (9-level). In order to successfully complete superintendent training and be awarded the 2M090 AFSC, personnel must complete the Senior Non-Commissioned Officer Academy (SNCOA) and be promoted to Senior Master Sergeant.

4. Community College of the Air Force (CCAF). Enrollment in the CCAF occurs upon completion of Basic Military Training. CCAF provides the opportunity to obtain an Associate of Applied Science Degree. In addition to its associate degree program, CCAF offers the following**:**

4.1. CCAF Instructor Certification. Personnel are formally recognized as qualified CCAF instructors following the completion of applicable coursework, internship, educational requirements, and practical teaching experience, and must be recommended by the school commander or commandant as outlined in the CCAF Policies, Procedures, and Guidelines.

4.2. Trade Skill Certification. When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. CCAF uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman (Supervisor), or Master Craftsman (Manager). All are transcribed on the CCAF transcript.

4.3. Degree Requirements. All Airman are automatically entered in the CCAF program. Prior to completing an associate degree, the 5-level must be awarded and the following requirements must be met. See the current CCAF Course Catalog for specific degree requirements:

Core Area	***Semester Hours***
Technical Education	24
Leadership, Management, and Military Studies	6
General Education	15
Program Elective	15
TOTAL Semester Hours	60

4.4. Additional off-duty education is a personal choice encouraged for all. Individuals desiring to become an AETC Instructor should be actively pursuing an associate degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools Commission on Colleges.

5. Career Field Path.

5.1. Table 5-1 provides a list of possible assignments. The assignments are subject to change without notice. Regular Air Force members interested in assignments should consult the Assignment Management System (AMS) for detailed information.

Table 5.1. Enlisted Assignments.

LOCATION	3-Level (AB-A1C)	5-Level (SrA)	5-Level (SSgt)	7-Level (TSgt)	7-Level (MSgt)
Minot AFB, ND	X	X	X	X	X
Malmstrom AFB, MT	X	X	X	X	X
FE Warren AFB, WY	X	X	X	X	X
Vandenberg SFB, CA		X	X	X	X
Hill AFB, UT		X	X	X	X
Edwards AFB, CA			X	X	X
Cape Canaveral SFS, FL			X	X	X
Barksdale AFB, LA				X	X
Kirtland AFB, NM				X	X
Los Angeles AFB, CA				X	
Peterson AFB, CO					X
Fort Belvoir, VA				X	X
Sheppard AFB, TX					X
Travis AFB, CA				X	X

5.2. Table 5.2 depicts a nominal career path for the Missile and Space Systems Maintenance specialty.

Table 5.2. 2M0X2 Career Path.

Rank	Upgrade Training	Professional Development (Note 1, 3)	Career Ladder (Note 2)
AB, Amn, A1C 	3-Level Apprentice - Complete initial training	- First-Term Airman's Center	- Technical Training Student - Technician
SrA 	5-Level Journeyman - 12 months in training (retrainees 9 months) - 2M052 CDC completed - Certified on core tasks	- Airman Leadership School - Air Force Training Course	- Technician - Team Chief - Instructor/Trainer - Evaluator - MMOC Controller - Scheduler - Code Controller
SSgt 	7-Level Craftsman - Minimum rank of SSgt - 12 months in training (retrainees 6 months) - Complete Missile and Space Craftsman Course (in-resident) - Certified on core tasks	- Finish CCAF - Air Force Training Course Opportunity to crossflow into Space Lift, Depot and eligible for DSD or AETC Tech Training.	- Team Chief - Instructor/Trainer - Evaluator - MMOC Controller - Scheduler - Code Controller Space Lift - Mission Assurance Technician - Space Launch Mx Technician - Space Launch Mx Team Chief - Instructor/Trainer

TSgt 		- NCO Academy - SEJPME	- Team Chief - Instructor/Trainer - Evaluator - MMOC Controller - Scheduler - Code Controller - Task Supervisor - Shop Supervisor - Expediter - NCOIC - MAJCOM/NAF Space Lift - Mission Assurance Technician - Space Launch Mx Technician - Space Launch Mx Team Chief - Instructor/Trainer - FIELDCOM - NCOIC
MSgt 		- SEJPME II	- Evaluator - Instructor/Trainer - Task Supervisor - Shop Supervisor - Production Superintendent - NCOIC - Flight Chief - MAJCOM/NAF Space Lift - FIELDCOM - NCOIC - Flight Chief - NRO
SMSgt 	9-Level Superintendent - Must sew on SMSgt and complete SNCOA.	- SNCO Academy	- Flight Chief - Manager - Production Superintendent - Superintendent - HAF/MAJCOM/NAF
CMSgt 	Chief Enlisted Manager (CEM)	- Chief Leadership Course	- QA Superintendent - Squadron Superintendent - Group Superintendent - MAJCOM Functional Manager - Career Field Manager
Note 1. This should be used as a guide to expand knowledge and increase functional skills. Note 2. This should be used as a guide to provide supervisors and members an idea of what positions they should be striving for to gain experience as they progress through the grade and skill levels. Note 3. The opportunity to crossflow exists at all levels at Staff Sergeant and above.			

5.3. Occupational Badge Wear Guidance. The following guidance details which occupational badges are worn by the Missile and Space Systems Maintenance AFSC and their award criteria.

5.3.1. By HQ USAF direction, personnel no longer earn occupational badges upon graduation from the 3-skill level initial training course.

5.3.2. Upon upgrade to the 5-skill level, personnel earn the Basic Missile Badge and Basic Maintenance Badge.

5.3.3. Upon upgrade to the 7-skill level, personnel earn the Senior Missile Badge and Senior Maintenance Badge.

5.3.4. Upon promotion to Master Sergeant, personnel earn the Master Missile Badge and the Master Maintenance Badge, granted 5-years has passed since upgrade to the 7-skill level.

5.3.5. If worn together, the Missile Badge will be worn above the Maintenance Badge. Otherwise, members may choose which occupational badge (Maintenance or Missile Badge) to wear above the left US Air Force tape.

PART I

Section C - SKILL LEVEL TRAINING REQUIREMENTS

1. Purpose. Skill level training requirements in this specialty are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms, and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are in the STS in Attachment 2 of this CFETP.

2. Missile and Space Systems Maintenance Apprentice (3-skill level).

2.1. Specialty Qualification.

2.1.1. Knowledge. Knowledge is mandatory in hydraulics, pneumatics, mechanics, and electricity, missile propulsion principles and the use of diagrams and schematics.

2.1.2. Education. For entry into this specialty, completion of high school or a General Educational Development (GED) equivalency is mandatory.

2.1.3. Training. For award of the 2M032 AFSC, completion of the basic 3-level missile and space maintenance apprentice course is mandatory.

2.1.4. Experience. Training and qualification in all 3-level core tasks identified in the STS is mandatory. Completion of the 3-level missile and space maintenance course satisfies this requirement, thus no further documentation is required.

2.1.5. Other. For entry into this specialty, the following are mandatory:

2.1.5.1. Screened for eligibility and meet requirements of the Personnel Reliability Program (PRP) as outlined in HQ AETC PRP Prescreening Guidance.

2.1.5.2. Passing color vision, as defined by correctly identifying at least 10 of 14 Ishihara Plates.

2.1.5.3. Qualification to operate government vehicles according to AFI 24-301, *Vehicle Operations.*

2.1.5.4. Freedom from fear of heights or claustrophobia.

2.1.5.5. Completion of a Tier 5 Investigation according to AFMAN 16-1405, *Air Force Personnel Security Program Management.* Award of the 3-level is authorized without a completed Single Scope Background Investigation (SSBI) provided an interim Top Secret clearance has been granted IAW AFMAN 16-1405.

2.2. Training Sources and Resources. Mandatory training and experience is provided in the basic 3-level missile and space maintenance apprentice course.

2.3. Implementation. Award of the 3-level is granted upon completion of the 3-level missile and space maintenance apprentice course, if all other entry requirements have been satisfied.

3. Missile and Space Systems Maintenance Journeyman (5-skill level).

3.1. Specialty Qualification.

3.1.1. Training. Completion of the 2M052 CDC is mandatory. Additionally, qualification on applicable 5-level core tasks for the assigned duty section is required. 5-level core task qualification is waived for individuals assigned to locations that do not have core tasks identified or where the equipment does not exist.

3.1.2. Experience. Qualification in and possession of AFSC 2M032. Experience is mandatory in missile maintenance duty sections, such as MMT, MHT, SST, or MAPS. Additionally, 12 months of training from the start of Journeyman upgrade training is required (9 months for retrainees).

3.1.3. Other. For award and retention of this specialty, the following are mandatory:

3.1.3.1. Must meet eligibility requirements to fill critical PRP positions.

3.1.3.2. Must maintain local area network access.

3.1.3.3. Must complete a Tier 5 investigation according to AFMAN 16-1405.

3.2. Training Sources/Resources. The STS identifies all core tasks required for an individual's duty section.

3.3. Implementation. Entry into Journeyman upgrade training will be initiated when an individual possesses the 2M032 AFSC and is assigned to their unit. The individual may then be enrolled in the 2M052 CDC. Award of the 5-level is granted upon completion of all training and experience requirements, including time-in-training requirements.

4. Missile and Space Systems Maintenance Craftsman (7-skill level).

4.1. Specialty Qualification.

4.1.1. Training. Completion of the Missile and Space Craftsman Course (in-resident) is mandatory. Additionally, qualification on applicable 7-level core tasks is mandatory.

4.1.2. Experience. Qualification in and possession of AFSC 2M052. Experience is mandatory performing or supervising functions in MMT, MHT, MAPS, or SST. Additionally, 12 months of training from the start of Craftsman upgrade training is required (6 months for retrainees).

4.1.3. Other. For award and retention of this specialty, the following are mandatory:

4.1.3.1. Must meet eligibility requirements to fill critical PRP positions.

4.1.3.2. Must maintain local area network access.

4.1.3.3. Must complete a Tier 5 investigation according to AFMAN 16-1405.

4.2. Training Sources/Resources. Mandatory training is provided in the Missile and Space Craftsman Course (in-resident). Other core tasks are identified in the STS.

4.3. Implementation. Entry into Craftsman upgrade training is initiated when the individual possesses the 2M052 AFSC and is awarded a promotion sequence number to Staff Sergeant. The individual may be scheduled to attend the Missile and Space Craftsman Course (in-resident) upon recommendation of the supervisor. Award of the 7-level is granted upon promotion to Staff Sergeant, granted completion of all training and experience requirements, including time-in-training requirements have been met.

5. Missile and Space Systems Superintendent (9-skill level). On their Senior Master Sergeant promotion effective date, a 2M072 will automatically be awarded the 2M090 AFSC.

PART I

Section D - RESOURCE CONSTRAINTS

1. Purpose. This section identifies known resource constraints that preclude optimal and desired training from being developed or conducted, including information on cost and manpower. This section includes a narrative explanation of each resource constraint and impact statement describing what impact each constraint has on training. Also included in this section are actions required, OPR, and target completion rates. As a minimum, these constraints are reviewed and updated annually.

1.1. The Missile and Space Craftsman Course (in-resident) is awaiting funding approval. Until the course is funded and available for scheduling, the requirements of the course can be taught locally by the supervisor or designated trainer. Evaluation of knowledge objectives is waived, but task performance requirements will be trained in accordance with AFI 36-2670. This constraint no longer applies when the course is available for scheduling.

1.2. The Payload Transporter Replacement (PTR) and Transporter Erector Replacement (TERP) are not completely fielded yet. Until the applicable unit has achieved Full Operational Capability using these two special purpose vehicles, the core tasks associated with them are not applicable. Once the unit as a whole has the vehicles and the training capability, these core tasks become applicable before upgrade.

PART II

Section A – SPECIALTY TRAINING STANDARD

1. Implementation. This STS will be used for technical training provided by AETC for 2M0X2 courses. The 2M032 course remains unchanged with this revision. The requirements of the Missile and Space Craftsman Course (in-resident) will be implemented no earlier than 1 August 2021. The 2M072 CDC will continue to be used for craftsman knowledge training until 1 August 2021.

2. Purpose. As prescribed, this STS:

2.1. Column 1 lists the applicable task numbers, identified sequentially for the most common task and knowledge requirements. Column 2 identifies the specific task or knowledge to be trained and Column 3 identifies the technical references necessary to perform duties in the 3-, 5-, and 7-skill levels.

2.2. Lists core tasks for 3-, 5- and 7-skill level upgrade for the 2M0X2 AFSCs. The number indicates which skill level the task is applicable for upgrade to.

2.3. Column 4 identifies certification for OJT/qualification and is used to record completion of tasks and knowledge training requirements. Use automated training management systems to document training start, training completion, and acknowledgement of trainer and trainee certification.

2.4. Column 5 outlines formal training and CDC requirements.

2.4.1. 3LVL identifies 3-skill level Missile and Space Maintenance Apprentice course requirements.

2.4.2. 5LVL CDC identifies knowledge requirements for the advancement to the 5-skill level.

2.4.3. 7LVL identifies task/knowledge requirements for the advancement to the 7-skill level.

2.4.4. Qualitative Requirements. The proficiency code key is used to indicate level of training and knowledge provided by resident technical school (AETC) training and career development courses.

2.5. Used to document task qualifications when placed in an automated system (TBA, TFTR, etc.) and used according to AFI 36-2670. For documentation, decertification/recertification and transcribing procedures see AFI 36-2670.

2.6. IAW AFI 36-2670, the 2M0 AFCFM has directed that no core tasks require third-party certifications.

2.7. All 2M0X2 SNCOs, who are qualified on and are currently performing technical tasks (e.g. technician, team chiefs, instructors, evaluators), must maintain a CFETP within TBA or TFTR.

2.8. Qualification training will be documented in TBA or TFTR.

2.9. Space lift Tasks. Common Space lift tasks can be found in the TBA or TFTR database titled 2M0XX-000. These tasks apply to 2M0s assigned to Space lift positions.

2.10. Recommendations.

2.10.1. For comments and recommendations concerning quality of AETC training, or if you need to report unsatisfactory performance of individual course graduates, please contact "532 TRS/TTV, 1472 Nevada Avenue, Vandenberg SFB, California 93437-5305," and identify the applicable STS items and comments.

2.10.2. Additionally, a 24-hour Customer Service Information Line has been developed to report over- or under-training on task/knowledge items listed in the STS. For a quick response to any AETC training problem, call DSN 276-7039 (Comm 805-606-7039).

2.10.3. Report inadequacies and suggested corrections to this CFETP or STS to the 2M0 AFCFM (DSN 222-9941) through your MAJCOM functional manager. You may also identify suggested corrections or inadequacies on the 2M0 Sharepoint site at the following link: https://usaf.dps.mil/teams/11262/HAF/HAF-A4LW/2M0EDT/SitePages/Home.aspx

WARREN D. BERRY
Lieutenant General, USAF
DCS/Logistics, Engineering and Force Protection

PART II

Section B - COURSE OBJECTIVE LISTING

There are currently no course objectives requirements. This area is reserved.

Section C - SUPPORT MATERIALS

There are currently no support material requirements. This area is reserved.

Section D - TRAINING COURSE INDEX

1. Purpose. This section identifies mandatory and optional training courses available in the Missile and Space Systems Maintenance specialty.

2. **Skill-Level Awarding Course.** Completion of the following courses are mandatory for the award of 3- and 7-skill levels.

CRS NO./TITLE	*MDS/EQUIP*	*LOCATION*	*USER*
V3ABR2M032 088B Missile and Space Systems Maintenance Apprentice	ICBM	Vandenberg	AFGSC
V3ACR2M07X 088A Missile and Space Maintenance Craftsman (projected available August 2021)	ICBM / ALCM / SPACE	Vandenberg	AFGSC

3. Other In-Residence Courses. These courses are optional courses, however, may be mandatory depending on what qualification training is needed.

CRS NO./TITLE	*MDS/EQUIP*	*LOCATION*	*USER*
J4AMP2M0X2 A88B / PDS Code: 1WY MM III-Missile Maintenance Team Chief	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 B88B / PDS Code: 1WZ MM III-Missile Maintenance Technician Journeyman Topside Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 C88B / PDS Code: 1X0 MMIII-Missile Maintenance Technician Journeyman Board Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 D88B / PDS Code: 1X1 MMIII - Missile Maintenance Technician Journeyman Cage Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 E88A / PDS Code: 1X2 MMIII MMT-Simulated Electronic Launch (SELM) Bottomside	ICBM	FE Warren Minot Malmstrom	AFGSC

J4AMP2M0X2 F88A / PDS Code: 1X3 MMIII MMT-Simulated Electronic Launch (SELM) Topside	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 G88A / PDS Code: 1X4 MMIII MMT-Hardness Surveillance Electromagnetic Pulse (HSEP) Bottomside	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 H88A / PDS Code: 1XQ MMIII MMT-Hardness Surveillance Electromagnetic Pulse (HSEP) Topside	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 I88A / PDS Code: 21B MMIII MMT-Guidance and Control Umbilical Cable Replacement	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 J88A / PDS Code: 1WW MMIII MMT-Launcher Closure Multiplying Linkage	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 K88A / PDS Code: 1WX MMIII MMT-Skirt Umbilical Cable Replacement Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 L88A / PDS Code: 277 MMIII MMT-Launcher Closure Components Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 M88A / PDS Code: 285 MMIII MMT - Launch Facility Destructive Break-In Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 N88A / PDS Code: 0OE MMIII - Missile Maintenance Technician Fundamentals Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 O88A / PDS Code: 0P9 MMIII - Umbilical Cables Trouble Analysis Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0X2 P88A / PDS Code: 0OQ MMIII - Missile Suspension System Components Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0XX H88A / PDS Code: 1JT MMIII - Launch Facility Entry & Exit	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0XX A88A/ PDS Code: 1X7 MMIII - Special Purpose Vehicle Operators Military Driving Familiarization (MDF)	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0XX B88A / PDS Code: 1X8 MMIII - Special Purpose Vehicle Operators Forklift Course	ICBM	FE Warren Minot Malmstrom	AFGSC

J4AMP2M0XX C88B / PDS Code: 1X9 MMIII - Commercial Vehicle Operations Training Fundamentals Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0XX D88A / PDS Code: 1XA MMIII - Commercial Vehicle Operations Training Payload Transporter Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0XX E88A / PDS Code: 1XB MMIII - Special Purpose Vehicle Operators Crane w/Manual Transmission Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0XX F88A / PDS Code: 1XC MMIII - Special Purpose Vehicle Operators Crane w/Automatic Transmission Course	ICBM	FE Warren	AFGSC
J4AMP2M0XX G88A / PDS Code: 1Z6 MMIII - Special Purpose Vehicle Operators Skid and Gravel Refresher Course	ICBM	FE Warren Minot Malmstrom	AFGSC
J4AMP2M0XX J88A / PDS Code: 1Z9 MMIII - Special Purpose Vehicle Operators Compact Loader Course	ICBM	FE Warren Minot Malmstrom	AFGSC
MNUC200 / PDS: 2X1 AF Nuclear Fundamentals Course (Nuclear 200)	ICBM	Kirtland AFB	All
MNUC300 / PDS: 0I5 Advanced Nuclear Concepts Course (Nuclear 300)	ICBM	Kirtland AFB	All
CKVNUC0000600SU / PDS: 05G AF Nuclear Certified Equipment (NCE) Users Course	ICBM	Kirtland AFB	AFGSC AFMC
MSPACE 200 / PDS: OTR Space 200	Space	Peterson SFB	USSF
MSPACE300 / PDS: OTS Space 300	Space	Peterson SFB	USSF

4. Distance Learning/Distributed Learning Courses. This course is mandatory for upgrade to the 5-skill level.

CRS NO.	***COURSE TITLE***
CDC 2M052	Missile and Space Systems Maintenance Journeyman

5. Other Distance Learning Courses. These are courses are optional, but may be mandatory, as determined by unit of assignment.

CRS NO.	*COURSE TITLE*
ACQ 101	Fundamentals of Systems Acquisition Management (Defense Acquisition University)
LOG 100	Life Cycle Logistics Fundamentals (Defense Acquisition University)
LOG 102	Fundamentals of System Sustainment Management (Defense Acquisition University)
LOG 103	Reliability, Availability, and Maintainability (RAM) (Defense Acquisition University)
CLL 008	Designing for Supportability in DoD Systems (Defense Acquisition University)
CLL 011	Performance Based Logistics (PBL) (Defense Acquisition University)
SPACE 100	Space 100 Course (USSF) (National Security Space Institute)

Section D – MAJCOM/FIELDCOM UNIQUE REQUIREMENTS

There are currently no MAJCOM or FIELDCOM unique requirements. This area is reserved.

Attachment 1. Proficiency Code Key

	Scale Value	Definition: The individual
Task Performance Levels	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (Extremely Limited)
	2	Can do most parts of the task. Needs only help on hardest parts. (Partially Proficient)
	3	Can do all parts of the task. Needs only a spot check of completed work. (Competent)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (Highly Proficient)
*Task Knowledge Levels	a	Can name parts, tools, and simple facts about the task. (Nomenclature)
	b	Can determine step by step procedures for doing the task. (Procedures)
	c	Can identify why and when the task must be done and why each step is needed. (Operating Principles)
	d	Can predict, isolate, and resolve problems about the task. (Advanced Theory)
**Subject Knowledge Levels	A	Can identify basic facts and terms about the subject. (Facts)
	B	Can identify relationship of basic facts and state general principles about the subject. (Principles)
	C	Can analyze facts and principles and draw conclusions about the subject. (Analysis)
	D	Can evaluate conditions and make proper decisions about the subject. (Evaluation)

Explanations

* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)

** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.

- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC. X

This make is used alone in course columns to show that training required but not given due to limitations in resources.

NOTE: All tasks and knowledge items shown with a proficiency code are trained during war time.

Attachment 2. 2M0X2 Specialty Training Standard

TASK ID	TASKS, KNOWLEDGE, REFERENCES	TRAINING REFERENCE	CORE TASK	3-lvl CRSE	5-lvl CDC	7-lvl CRSE
1	**SPECIALTY INTRODUCTION**					
1.1	Duties of AFSC 2M0X2	AFMAN 21-202, AFECD		A	A	-
1.2	2M0X2 Career Ladder Progression	2M0X2 CFETP		A	-	-
2	**ORGANIZATION**					
2.1	Organizational Structure	AFPD 38-1, AFI 38-101		A	B	-
2.2.	Functions and responsibilities of missile organizations	AFMAN 21-202		A	B	-
3	**SPACELIFT MISSION**	**AU-18, Space Primer, Space Force Capstone Doctrine Document**				
3.1	Space domain overview			A	-	A
3.2	Roles and responsibilities			-	-	A
3.3	Launch vehicle characteristics			-	-	A
3.4	Spacecraft characteristics			-	-	A
3.5	Processing and infrastructure overview			-	-	A
3.6	Launch Enterprise overview			-	-	A
4	**DOCTRINE**					
4.1	Description	Basic Doctrine, Vol 1		A	-	B
4.2	Nuclear Operations Overview	Annex 3-72		A	-	B
4.3	AFTTP 3-3. Muns and Missile Mx Overview	AFTTP 3-3		-	-	B
4.4	AFTTP 3-3 ICBM Overview	AFTTP 3-3		-	-	B
5	**ADMINISTRATION**	**AFI 36-2670, AFMAN 21-202**				
5.1	Perform initial eval/work center orientation		7	-	-	3c
5.2	Conduct pre-dispatch/pre-task maintenance briefings		7	-	-	3c
5.3	Technician duties		-	B	-	-
5.4.	Verify vehicle & equipment configuration prior to dispatch	AFMAN 21-202	-	-	-	-
5.5.	Team Chief duties			-	B	B
5.6	Task Supervisor Duties			-	-	B
6	**TRAINING**	**AFI 36-2670, AFMAN 21-202**				
6.1	Plan and supervise training programs		7	-	-	3c
6.2	Instructor/trainer duties			-	B	-
6.3	Conduct qualification training			-	-	-
6.4	Maintain training records		7	-	-	3c
7	**PUBLICATIONS**					
7.1	Standard publications	DAFI 33-360				
7.1.1.	Description			A	-	-
7.1.2.	Use standard publications			-	-	-
7.2.	Technical Orders (TO) System	T.O. 00-5-1				
7.2.1	Description			A	-	B
7.2.2.	Use technical orders			3c	-	-
7.2.3.	Initiate TO improvement report			-	b	-
7.2.4.	Isolate fault using TO fault flow	T.O. 21M-LGM30G-2-1-X		-	-	2b
7.3	Civil Engineering Manuals (CEMs)	AFGSCI 32-1005				
7.3.1.	Description			-	A	-
7.3.2	Use CEMs			-	b	-
7.3.3.	Initiate CEM improvement report			-	b	-

8	**SAFETY**	**AFI 91-X, 91-104, 91-105, 91-107, 91-114, 91-201, 91-202, 91-301, TOs 00-25-245, 31-1-141, 21M-LGM30G-2-10, AFMAN 91-203**				
8.1	Hazards of AFSC			B	-	-
8.2	Inspect personal safety equipment			3c	-	-
8.3	Use emergency breathing apparatus	TOs 14S5-16-1, 14S5-18-1, 14S5-30-2, 14S5-32-1; Applicable Manufacturers Operation and Service Instructions		-	-	-
8.4	Hazardous Communication (HAZCOM)	29 CFR Part 1910, AFOSH 161-21, AFOSHTD 161-21.1W DoD Federal Hazard Communication Training Program, TR: AFI 90-821		A	-	-
8.5	USAF Mishap Prevention Program	AFI 91-202				
8.5.1	Description			A	-	-
8.5.2	Explosives Safety Standards	AFMAN 91-201		A	-	-
9	**NUCLEAR WEAPONS SURETY**	**AFI 91-101. 91-114, AFMAN 91-221**				
9.1	Nuclear Surety					
9.1.1	Nuclear Surety Program			A	-	-
9.1.2	Two Person Concept			A	-	-
9.1.3	Weapon System Safety Rules			A	-	B
9.1.4	Nuclear deficiency reports			A	-	-
9.1.5.	Report nuclear surety deficiencies (DULL SWORD)			-	-	2b
9.2	Nuclear Certified Equipment (NCE)	AFI 63-125 and MNCL				
9.2.1	Description/Positive Identification/Restrictions			A	A	-
9.2.2	NCE Management			-	-	B
9.2.3	Perform nuclear certification verification using MNCL			2b	-	-
9.3	Nuclear Weapons Logistics Movements	AFI 21-203				
9.3.1	Custody transfer process			-	A	-
9.3.2	Complete AF Form 504, Weapons Custody Transfer Document			-	-	-
10	**MAINTENANCE DATA DOCUMENTATION (MDD)**					
10.1	Purpose & description	TO 00-20-2		A	B	B
10.2	Use work unit code manuals	TOs 21M-LGM30F-06-1, 21M-LGM30F-06-3, 21M-LGM30F-06-4, 21M-LGM30F-06-5	7	2b	-	3c
10.3	Complete AFTO 350 Tags	TO 00-20-2		2b	-	-
10.4	Complete DD Form 1500-Series Tags	TO 00-20-3		2b	-	-
10.5	Complete AFTO Form 95, Significant Historical Data	TO 00-20-1		-	a	-
10.6	Use AFTO Form 244/245, Industrial Support Equipment Record	T.O. 00-20-1		-	b	-
10.7	Evaluate MDC tags	TOs 00-20-1, 00-20-2		-	-	2b
10.8	Use alternate MDD forms & methods	T.O. 00-20-2		-	-	-
10.9	Integrated Maintenance Data System (IMDS)	IMDS User's Guide, TO 00-20-2				
10.9.1	Description			A	-	-
10.9.2	Use IMDS		5	-	-	-
10.9.3	Perform supervisory data review		7	-	-	3c
10.10	Deficiency Reports	T.O. 00-35D-54				
10.10.1	Description			-	B	-
10.10.2	Initiate deficiency report		7	-	-	3c
10.11	Maintenance/Engineering Technical Assistance (MAR/TAR) Request	TO 00-25-107				
10.11.1	Description			-	B	-
10.11.2	Submit MAR/TAR		7	-	-	3c
11	**MATERIEL MANAGEMENT AND SUPPLY DISCIPLINE**					

11.1	Supply System Description	AFI 23-101, 23-111, 23-122, 23-123		-	B	B
11.2	Use illustrated parts breakdown (IPB)	T.O. 21M-LGM30G-4-4		2b	-	-
11.3	Complete AF Form 2005	AFH23-123V2PT1	5	-	b	-
11.4	Complete DD Form 1348-6 (MAPS/SST Core)	AFH23-123V2PT1	5	-	b	-
11.5	Supply stock (bench, shop, operating stock) description	AFI 23-101		A	B	-
11.6	Manage supply stock (bench, shop, operating stocks);	AFI 23-101		-	b	b
12	**TOOLS AND EQUIPMENT**					
12.1	Tools					
12.1.1	Manage tools	AFMAN 21-200, AFI 21-101		2b	-	-
12.1.2	Use tools	T.O. 32-1-101		3c	-	-
12.1.3	Use torque wrenches	T.O. 32B14-3-1-101		3c	-	-
12.2	Test Equipment					
12.2.1	Use digital multimeters (voltage/ohms functions)	TOs 33A1-12-159-1, 33A1-12-1092-1, 33A1-12-1176-1, 33A1-12-1177-1, 33A1-12-1198-1, 33A1-12-1199-1		3c	-	-
12.2.2	Use ammeters/current probes	TOs 33A1-12-145-21, 33A1-12-871-1, 33DA98-15-1, Applicable Manufacturers Operation and Service Instructions		-	-	-
12.2.3	Use gas monitor to detect PSRE leak	TO 21M-LGM30G-2-10		-	-	-
12.2.4	Use megohmeters	TOs 33A1-4-29-1, 33A1-4-35-1, 33A1-12 1212-1C, Applicable Manufacturers Operation and Service Instructions		-	a	-
12.2.5	Use controller-monitor	TOs 21M-LGM30G-2-12-2, 21M-LGM30G-2-33		-	-	-
12.2.6	Use Explosive Set Circuitry Test Set	TOs 33D9-38-15-21, 33D9-38-15-2, 33A1-12-1147-1, 33A1-12-1198-1, 33A1-12-1199-1, 33A1-12-13-1, 21M-LGM30G-2-33, 21M-LGM30G-2-28		2b	-	-
12.2.7	Operate Maintenance and Security Alarm Monitor II	T.O. 21M-LGM30G-2-35, MASAM Operation Procedures; TOs 21M-LGM30G-2-10; Applicable Manufacturers Operation and Service Instructions		-	-	-
12.2.8	Cable retraction test kit	TOs 21M-LGM30G-2-28-X, 33K-1-X, 35M1-1-101				
12.2.8.1	Description			-	A	-
12.2.8.2	Operate			-	-	-
12.2.8.3.	Replace components			-	-	-
12.2.8.4	Adjust components			-	-	-
12.2.8.5	Perform trouble analysis			-	-	-
12.2.8.6	Perform test after reassembly			-	-	-
12.2.9	Leak test fixture	TOs 1-1A-8, 21M-LGM30G-2-22, 33K-1- X, 35M1-1-101				
12.2.9.1	Description			-	B	-
12.2.9.2	Operate			-	b	-
12.2.9.3	Replace components			-	-	-
12.2.9.4	Perform trouble analysis			-	-	-
12.3.	Portable Equipment					
12.3.1	Operate portable heaters	TO 35E7-2-11-21, Applicable Manufacturers Operation and Service Instructions		-	-	-
12.3.2.	Operate portable pumps	TOs 21M-LGM30G-2-10; Applicable Manufacturers Operation and Service Instructions		-	-	-
12.4.	Special Tools					
12.4.1.	Operate terminal swagger kit	TO 33A16-3-1		-	-	-
12.4.2.	Operate portable cable terminal pull tester	TO 33A8-4-6-1		-	-	-
12.4.3.	Pneumatic swagger	TOs 32A16-3-1, 33A8-4-6-1				
12.4.3.1.	Fabricate cable ends			-	-	-
12.4.3.2.	Operate pull tester to verify cable ends			-	-	-
13	**GENERAL MAINTENANCE**	**TOs 00-25-234, 1-1A-1, 1-1A-8, 1- 1A-14, 1-1A-15, 33D9-61-58-2, applicable owners manual**				

13.1	Troubleshooting theory/techniques			-	B	B
13.2	Perform safety wiring			-	-	-
13.3	Perform common ordnance inspection	TO 11A15-1-167-1		-	-	-
13.4	Hardness assurance	T.O. 21M-LGM30G-2-31, 21M-LGM30G-2-10, AFMAN 21-202_AFGSCSUP				
13.4.1	Description			A	B	-
13.4.2	Nuclear weapons effects & design considerations			A	-	-
13.4.3	Hardness preservation			-	B	B
13.5	Aerospace Hardware (AN/MS)	TO 00-1A-8				
13.5.1	Description			A	-	-
13.5.2	Use aerospace hardware		3	3c	-	-
13.6	RFI/EMI Gaskets	TO 21M-LGM30F-112, 33D9-19-55-1				
13.6.1	Inspect			-	b	-
13.6.2	Repair			-	-	-
13.7	Electrostatic Discharge (ESD) Control Procedures	TO 00-25-234				
13.7.1	Description			A	-	-
13.7.2	Perform ESD procedures			3c	-	-
13.8	Common electrical practices					
13.8.1	AC/DC Current Terminology			B	-	-
13.8.2	Perform basic soldering/desoldering procedures	TO 00-25-259		-	-	-
13.8.3	Repair wiring	TO 00-25-234		-	-	-
13.8.4	Repair crimped electrical connections	TO 00-25-234		-	-	-
13.8.5	Perform electronic part replacement and repair	TO 00-25-234		-	-	-
13.8.6	Perform visual inspections	TO 00-25-234		-	-	-
13.9	Pressure Systems	TOs 00-25-223, 00-25-229, 1-1A-8, 33-1-19, 42B5-1-2, 42E1-1-1, 42E2-1-2, 44H3-1-3				
13.9.1	Flare tubing			-	-	-
13.9.2	Swage tubing			-	-	-
13.9.3	Replace components			-	-	-
13.9.4	Replace hoses & tubing			-	-	-
13.9.5	Fabricate hoses & tubing			-	-	-
13.9.6	Pneumatics	TOs 00-25-223, 00-25-229, 1-1A-8, 33-1- 19, 42B5-1-2, 42E1-1-1, 42E2-1-2, 44H3-1-3				
13.9.6.1	Operation			A	B	-
13.9.6.2	Read pneumatic flow diagrams (MAPS/SST Core)		5	-	b	-
13.9.7	Hydraulics	TOs 00-25-223, 00-25-229, 1-1A-8, 33-1- 19, 42B2-1-3, 42E1-1-1, 42E2-1-2, 44H3-1-3				
13.9.7.1	Operation			A	B	-
13.9.7.2	Read hydraulic flow diagrams (MAPS/SST core)		5	-	b	-
14	**ICBM WEAPON SYSTEMS DESCRIPTION**	**TOs 21M-LGM30G-1-1, 21M-LGM30G-21-X, 21M-LGM30G-2-10**				
14.1	Nuclear weapon theory and components			A	-	-
14.2	Missile			A	B	-
14.3	Launch Facility			A	B	-
14.4	Missile Alert Facility			A	B	-
14.5	Missile Support Base			A	B	-
15	**TEST AND EVALUATION**	**AFI 99-103, AFGSCI 99-102**				
15.1	Operational Test Launch description			-	A	B
15.2	Mission of Air Force Operational Test and Evaluation Centers			-	-	A
15.3	Simulated Electronic Launch Minuteman (SELM)	TOs 21M-LGM30G- 1-17, 21M-LGM30G- 1-18				
15.3.1	Description			-	A	B
15.3.2	Posture site for SELM					
15.3.2.1	Posture MGS for Battery Bypass/ Ground Power Option			-	-	-
15.3.2.2	Install SCM for Live/ Simulated option			-	-	-

15.3.3	Reposture site from SELM					
15.3.3.1	Reconfigure MGS			-	-	-
15.3.3.2	Umbilical/ Retraction Actuator Restoration/ Replacement			-	-	-
15.3.3.3	Missile Suspension System Restoration			-	-	-
15.3.3.4	Launcher Closure Restoration			-	-	-
15.3.3.5	Remove SCM			-	-	-
15.3.3.6	Enter LER			-	-	-
15.3.3.7	Exit LER			-	-	-
15.4	Hardness Surveillance Evaluation Program (HSEP)	TOs 21M-LGM30G-2-34				
15.4.1	HSEP Description			-	A	B
15.4.2	Configure site for HSEP			-	-	-
15.4.3	Deposture Site for HSEP			-	-	-
16	**MISSILE ALERT FACILITY (MAF)**					
16.1	Blast doors	TOs 21M-LGM30F-112, 21M-LGM30G-2 28, 35M-1-101, 35M3-11-2-1, 35M3-11-3-1; 42E1-1-1, 00-25-223, 21M-LGM30F-101				
16.1.1	Description			A	B	-
16.1.2	Inspect components (SST Core)		5	-	-	-
16.1.3	Service components			-	-	-
16.1.4	Repair components			-	-	-
16.1.5	Perform trouble analysis			-	-	-
16.1.6	Perform emergency opening			-	-	-
16.1.7	Perform operational checkout (SST Core)		5	-	-	-
16.2	Ventilation safety system	TOs 21M-LGM30X-2-28; 42E1-1-1, 00-25-223, CEM 21-SM80A-2-26-2, CEM 35R-1-481-2, 21M-LGM30F-6-WC-2				
16.2.1	Description			A	B	-
16.2.2	Inspect components (SST Core)		5	-	-	-
16.2.3	Service components			-	-	-
16.2.4	Repair components			-	-	-
16.2.5	Troubleshoot components			-	-	-
16.2.6	Perform operational checkout (SST Core)		5	-	-	-
16.3	Shock attenuation systems	TO 21M-LGM30X-2-28, 35M-1-101				
16.3.1	Spring type mechanical shock absorber system					
16.3.1.1	Description			-	B	-
16.3.1.2	Inspect components			-	-	-
16.3.1.3	Adjust			-	-	-
16.3.1.4	Repair			-	-	-
16.3.2	Pneumatic shock isolator system					
16.3.2.1	Description			A	B	-
16.3.2.2	Inspect components (SST Core)		5	-	-	-
16.3.2.3	Adjust shock isolators (SST Core)		5	-	-	-
16.3.2.4	Perform trouble analysis			-	-	-
16.3.2.5	Repair			-	-	-
16.3.3	Liquid shock isolator system					
16.3.3.1.	Description			-	B	-
16.3.3.2	Install/Remove LER shoring			-	-	-
16.3.3.3	Adjust			-	-	-
16.3.3.4	Service			-	-	-
16.3.3.5	Perform trouble analysis			-	-	-
16.3.3.6	Repair			-	-	-
16.3.4	Install/Remove LCC shoring					
16.3.4.1	Install/Remove A-Frame			-	-	-
16.3.4.2	Install/Remove Pedestal (SST Core)		5	-	-	-

16.3.5	LCC Shock Isolator Air Compressor	TO 34Y1-257-1				
16.3.5.1	Description			A	B	-
16.3.5.2	Inspect (SST Core)		5	-	-	-
16.3.5.3	Service (SST Core)		5	-	-	-
16.3.5.4	Perform trouble analysis			-	-	-
16.3.5.5	Repair			-	-	-
16.3.5.6	Perform operational checkout			-	-	-
16.3.5.7	Remove & install			-	-	-
16.3.5.8	Adjust			-	-	-
16.4	Operators seat, MCC/DMCC (on- or off-equipment)	TO 21M-LGM30G-2-28, 35M1-1-101				
16.4.1	Inspect			-	-	-
16.4.2	Troubleshoot			-	-	-
16.4.3	Repair			-	-	-
16.4.4	Perform functional checkout			-	-	-
17	**LAUNCH FACILITY**					
17.1	Launch facility	TOs 21M-LGM30G-1-1, 21M-LGM30G-2 10, 21M-LGM30G-2-7-X, 21M-LGM30G-2-17-9				
17.1.1	Enter (MMT Core)		5	1a	-	-
17.1.2	Exit (MMT Core)		5	1a	-	-
17.2	Launcher Support Building (LSB)	TOs 21M-LGM30G-1-1, 21M-LGM30G-2 10, 21M-LGM30G-2-7-X, 21M-LGM30G-2-17-9				
17.2.1	Enter (MMT Core)		5	1a	-	-
17.2.2	Exit (MMT Core)		5	1a	-	-
17.2.3	Perform emergency procedures for electrical isolation of LSB (MMT Core)		5	-	-	-
17.2.4	Perform LF ECS Brine Chiller Restart			-	-	-
17.2.5	Perform LF Diesel Start-up			-	-	-
17.3	Personnel access system (PAS)	TOs 21M-LGM30F-2-19, 21M-LGM30G-2-10, 35M1-9-2-2				
17.3.1	Replace hand-driven linear actuator			-	-	-
17.3.2	Perform Security Pit electrical test			-	-	-
17.4	Launcher Equipment Room (LER)	TOs 21M-LGM30G-1-1, 21M-LGM30G-2 10, 21M-LGM30G-2-7-X, 21M-LGM30G-2-17-9				
17.4.1	Enter (MMT Core)		5	1a	-	-
17.4.2	Exit (MMT Core)		5	1a	-	-
17.4.3	Use gas monitor to identify LEL	Owner's Manual		1a	-	-
17.4.4	Raise & lower equipment			2b	-	-
17.4.5	Perform emergency shutdown (MMT Core)		5	-	-	-
17.4.6	Evacuate LF for EWO launch (MMT Core)		5	-	-	-
17.4.7	Perform hostile LF securing (MMT Core)		5	-	-	-
17.4.8	Perform Contaminated Atmosphere Purge			-	-	-
17.4.9	Perform emergency response for loss of ESS power			-	-	-
17.4.10	Perform LER electronic rack power removal procedures			-	-	-
17.5	Launch tube	TOs 21M-LGM30G-1-1, 21M-LGM30G-2 10, 21M-LGM30G-2-7-X, 21M-LGM30G-2-17-9				
17.5.1	Enter			1a	-	-
17.5.2.	Exit			1a	-	-
17.5.3.	Perform sodium chromate/wet missile inspection	TO 21M-LGM30G-2-10		-	-	-
17.6	Launcher closure	TOs 21M-LGM30F-112, 21M-LGM30G-2-10, 21M-LGM30G-2-18, 21M-LGM30X-2-24-X, 21M1-1-101, 21M-LGM30X-2-28, 21M-LGM30G-2-10, 35M1-1-101, 11A15-1-167-1, CEM 21-SM80X-2-24-X, 21-SM80X-2-26-X				
17.6.1	Description			A	B	-
17.6.2	Launcher Closure system					
17.6.2.1	Open launcher closure (MMT Core)		5	1a	-	-
17.6.2.2	Close launcher closure (MMT Core)		5	1a	-	-

17.6.2.3	Perform destructive break-in			-	b	-
17.6.2.4	Inspect components			-	-	-
17.6.2.5	Service components			-	-	-
17.6.2.6	Remove components			-	-	-
17.6.2.7	Install components			-	-	-
17.6.2.8	Repair components			-	-	-
17.7	Ballistic Gas Generator Cartridge					
17.7.1	Inspect			-	-	-
17.7.2	Remove			-	-	-
17.7.3	Install			-	-	-
17.7.4	Checkout			-	-	-
17.7.5	Certify			-	-	-
17.8	Debris System					
17.8.1	Inspect			-	-	-
17.8.2	Remove & Install			-	-	-
17.9	Actuating and Locking Mechanism					
17.9.1	Inspect			-	-	-
17.9.2	Replace components			-	-	-
17.10	Multiplying Linkage					
17.10.1	Repair			-	-	-
17.10.2	Remove & Install			-	-	-
17.11	Missile suspension system	TO 21M-LGM30G-2-24-X, 21M-LGM30G-2-30, 21M-LGM30G-2-22; CEM 21 SM80F-2-26-2, 11A15-1-167-1, 21M- LGM30G-2-21, 21M-LGM30G-2-18, add 21M-LGM30G-2-28				
17.11.1	Description			A	B	-
17.11.2	Inspect components			-	-	-
17.11.3	Service components			-	-	-
17.11.4	Replace components			-	-	-
17.11.5	Adjust components			-	-	-
17.11.6	Perform trouble analysis			-	-	-
17.12	Explosive Bolts					
17.12.1	Remove			-	-	-
17.12.2	Install			-	-	-
17.13	Ordnance Cable					
17.13.1	Disconnect & Connect			-	-	-
17.13.2	Repair latch assembly			-	-	-
17.14	Azimuth Drive Unit					
17.14.1	Remove			-	-	-
17.14.2	Install			-	-	-
17.15	Umbilicals	TOs 21M-LGM30G-2-22, 11A15-1-167-1				
17.15.1	Description			A	B	-
17.15.2	Guidance & Control (G&C) Umbilical					
17.15.2.1	Remove			-	-	-
17.15.2.2	Install			-	-	-
17.15.2.3	Replace components			-	-	-
17.15.2.4	Disconnect at the D-box			-	-	-
17.15.2.5	Disconnect at the missile			-	-	-
17.15.2.6	Connect at the missile			-	-	-
17.15.2.7	Connect at the D-box			-	-	-
17.15.2.8	Perform trouble analysis			-	-	-
17.15.2.9	Replace G&C Umbilical Plug Jumper Assembly			-	-	-

17.5.3	Skirt Umbilical					
17.5.3.1	Remove			-	-	-
17.5.3.2	Install			-	-	-
17.5.3.3	Disconnect at the D-box			-	-	-
17.5.3.4	Disconnect at the missile			-	-	-
17.5.3.5	Connect at the missile			-	-	-
17.5.3.6	Connect at the D-box			-	-	-
17.5.3.7	Perform trouble analysis			-	-	-
17.6	Umbilical Retraction/Actuator/Cartridge/Components					
17.6.1	Remove & Install			-	-	-
17.6.2	Perform electrical checkout			-	-	-
17.6.3	Perform trouble analysis			-	-	-
18	**AEROSPACE VEHICLE EQUIPMENT (AVE)**					
18.1	Missile	TOs 21M-LGM30F-2-17-3, 21M-LGM30G-2-22, 21M-LGM30G-2-33, 11A15-1-167-1,				
18.1.1	Remove sling rods after emplacement			-	-	-
18.1.2	Install sling rods for missile removal			-	-	-
18.1.3	Rotate missile			-	-	-
18.1.4	Level missile			-	-	-
18.2	Reentry System (RS)	TOs 21M-LGM30F-2-17-3, 21M-LGM30G-2-33, 11A15-1-167-1				
18.2.1	Description			A	B	-
18.2.2	Remove (MMT Board/Cage Core)		5	2b	-	-
18.2.3	Install (MMT Board/Cage Core)		5	2b	-	-
18.2.4	Checkout electrical system (MMT Board/Cage)		5	1a	-	-
18.2.5	Checkout warhead monitor loop (MMT Board/Cage)		5	1a	-	-
18.2.6.	PTIII RS Operations					
18.2.6.1	Load (MMT Topside)		5	b	-	-
18.2.6.2.	Unload (MMT Topside)		5	b	-	-
18.2.6.3.	Handle (MMT Topside)		5	2b	-	-
18.2.6.4.	Transport			-	b	-
18.2.6.5.	Perform alternate RS loading/unloading procedures			-	-	-
18.2.7.	PTR RS Operations					
18.2.7.1.	Load (MMT Topside)	21M-LGM30G-2-36	5			
18.2.7.2.	Unload (MMT Topside)	21M-LGM30G-2-36	5			
18.2.7.3.	Handle (MMT Topside)	21M-LGM30G-2-36	5			
18.2.7.4.	Transport	21M-LGM30G-2-36				
18.2.7.5.	Perform alternate RS loading/unloading procedures	21M-LGM30G-2-36				
18.2.8.	Perform Controlled Start-up	TO 21M-LGM30G-2-12-2		-	-	-
18.2.9.	Perform missile startup after RS maintenance			-	-	-
18.2.10.	Install/remove RS simulator			-	-	-
18.2.11.	Prepare RS for Strategic Arms Reduction Treaty (START) inspection using PTIII			-	-	-
18.2.12.	Prepare RS for Strategic Arms Reduction Treaty (START) inspection using PTR	21M-LGM30G-2-36				
18.2.13.	Inspect insulation			2b	-	-
18.3	Missile Guidance Set (MGS)	TO 11A15-1-167-1, 20M-LGM30G-2-33, 21M-LGM30F-2-17-3, EAP-STRAT VOLUME 16				
18.3.1	Description			A	B	-
18.3.2	Remove			2b	-	-
18.3.3	Install (MMT Board/Cage)		5	2b	-	-
18.3.4	Checkout MGS to RS interface cables			-	b	-
18.3.5	Remove components			-	b	-
18.3.6	Install components			-	b	-

18.3.7	Load using PTIII (MMT Core)		5	b	-	-
18.3.8	Unload using PTIII (MMT Core)		5	b	-	-
18.3.9.	Load using PTR (MMT Core)	21M-LGM30G-2-36	5			
18.3.10.	Unload using PTR (MMT Core)	21M-LGM30G-2-36	5			
18.3.11	Handle (MMT Topside)		5	2b	-	-
18.3.12.	Transport			-	b	-
18.3.13.	Checkout accidental missile ignition (AM) system			b	-	-
18.3.14.	Inspect radiation shielding			2b	-	-
18.3.15.	Repair radiation shielding			-	-	-
18.4	Propulsion System Rocket Engine (PSRE)	TOs 21M-LGM30F-2-17-3, 21M-LGM30G-2-33, 11A15-1-167-1				
18.4.1	Function and operation			A	B	-
18.4.2	Remove			-	b	-
18.4.3	Install			-	b	-
18.4.4	Load using PTIII (MMT Core)		5	-	b	-
18.4.5	Unload using PTIII (MMT Core)		5	-	b	-
18.4.6	Load using PTR (MMT Core)	21M-LGM30G-2-36	5			
18.4.7.	Unload using PTR (MMT Core)	21M-LGM30G-2-36	5			
18.4.8.	Emergency handling procedures			-	B	-
18.4.9.	Handle Sodium Chromate-Contaminated PSRE			-	b	-
18.4.10.	Handle		5	-	b	-
18.4.11.	Transport			-	b	-
18.5	Post Boost Control System (PBCS)	TOs 21M-LGM30F-2-17-3, 21M-LGM30G-2-33, 11A15-1-167-1				
18.5.1	Function and operation			A	B	-
18.5.2	Inspect PSRE & MGS insulation			2b	-	-
18.5.3	Repair PSRE & MGS insulation			-	b	-
18.5.4	Remove			-	b	-
18.5.5	Install (MMT Board/Cage)		5	-	b	-
18.5.6	Load using PTIII (MMT Core)		5	-	-	-
18.5.7	Unload using PTIII (MMT Core)		5	-	-	-
18.5.8.	Load using PTR (MMT Core)	21M-LGM30G-2-36	5			
18.5.9.	Unload using PTR (MMT Core)	21M-LGM30G-2-36	5			
18.5.10.	Handle (MMT Topside)		5	-	-	-
18.5.11.	Transport			-	b	-
18.6.	Safing Pins	TO 21M-LGM30G-2-33				
18.6.1.	Install			2b	-	-
18.6.2.	Remove			2b	-	-
19	**MISSILE HANDLING AND TRANSPORTING**	**21M-LGM30F-2-2-1, 21M-LGM30G-2-2-1, 35D3-11-52-2**				
19.1	Handling and transporting			A	B	-
19.2	Handling equipment	TOs 21M-LGM30F-2-2-1, 35A2-5-25-1, 35M19-3-26-1		A	B	-
19.3	Perform missile receipt/shipment inspection (MHT Core)		5	-	-	-
19.4	Repair first stage nozzle			-	-	-
19.5	Perform Empty Rocket Motor Carriage Handling			-	-	-
19.6	Position missile for START			-	-	-
19.7.	Position missile for START (TERP)	TO 21M-LGM30G-2-2-1				
19.8.	Perform enroute inspection			-	-	-
19.9.	Perfom enroute inspection (TERP)	TO 21M-LGM30G-2-2-1				
19.10.	Missile roll transfer operations					
19.10.1	Perform pre-roll transfer procedures					
19.10.1.1.	TE to MT transfer (MHT Core)		5	-	-	-
19.10.1.2.	MT to TE transfer (MHT Core)		5	-	-	-

19.10.1.3.	TERP to MT transfer (MHT Core)	TO 21M-LGM30G-2-2-1	5			
19.10.1.4.	MT to TERP transfer (MHT Core)	TO 21M-LGM30G-2-2-1	5			
19.10.2.	Perform roll procedures to transfer missile from:					
19.10.2.1.	TE to MT (MHT Core)		5	-	-	-
19.10.2.2.	MT to TE (MHT Core)		5	-	-	-
19.10.2.3.	TERP to MT (MHT Core)	TO 21M-LGM30G-2-2-1	5			
19.10.2.4.	MT to TERP (MHT Core)	TO 21M-LGM30G-2-2-1	5			
19.10.3.	Preform post-roll procedures					
19.10.3.1.	TE to MT transfer (MHT Core)		5	-	-	-
19.10.3.2.	MT to TE transfer (MHT Core)		5	-	-	-
19.10.3.3.	TERP to MT transfer (MHT Core)	TO 21M-LGM30G-2-2-1	5			
19.10.3.4.	MT to TERP transfer (MHT Core)	TO 21M-LGM30G-2-2-1	5			
19.11.	Preform procedures for storage/handling of the loaded					
19.11.1.	Transporter erector			-	-	-
19.11.2.	Transport erector replacement (TERP)	TO 21M-LGM30G-2-2-1				
19.11.3.	Missile transporter			-	-	-
19.12.	Monitoring equipment					
19.12.1	Remove & Install PAL 2000			-	-	-
19.12.2.	Operate PAL 2000			-	-	-
19.12.3.	Remove & Install Saver 3X90			-	-	-
19.12.4.	Operate Saver 3X90			-	-	-
19.12.5.	Operate Sensaphone	Owners Manual		-	-	-
19.13	Missile emplacement					
19.13.1	Using TE	TO 21M-LGM30F-2-2-1				
19.13.1.1.	Position and tie down TE at LF (MHT Core)		5	-	-	-
19.13.1.2.	Prepare TE for missile emplacement (MHT Core)		5	-	-	-
19.13.1.3.	Emplace missile (MHT Core)		5	-	-	-
19.13.1.4.	Prepare TE for travel			-	-	-
19.13.1.5.	Remove TE from pylons at LF			-	-	-
19.13.1.6.	Perform emergency missile emplacement			-	-	-
19.13.2	Using TERP	TO 21M-LGM30G-2-2-1				
19.13.2.1.	Position and tie down TERP at LF (MHT Core)		5			
19.13.2.2.	Prepare TERP for missile emplacement (MHT Core)		5			
19.13.2.3.	Emplace missile (TERP) (MHT Core)		5			
19.13.2.4.	Prepare TERP for travel					
19.13.2.5.	Remove TERP from Pylons					
19.13.2.6.	Perform emergency missile emplacement (TERP)					
19.13.3.	Inspect insulation on missile downstage			-	-	-
19.13.4.	Repair insulation on missile downstage			-	-	-
19.14	Missile removal					
19.14.1.	Using TE	TO 21M-LGM30F-2-2-1				
19.14.1.1.	Position and tie down TE at LF			-	-	-
19.14.1.2.	Prepare TE for missile removal (MHT Core)		5	-	-	-
19.14.1.3.	Remove missile (MHT Core)		5	-	-	-
19.14.1.4.	Prepare TE and missile for travel (MHT Core)		5	-	-	-
19.14.1.5.	Remove TE from pylons at LF			-	-	-
19.14.1.6.	Perform emergency missile removal			-	-	-
19.14.2.	Using TERP	TO 21M-LGM30G-2-2-1				
19.14.2.1.	Position and tie down TERP at LF					
19.14.2.2.	Prepare TERP for missile removal (MHT Core)		5			
19.14.2.3.	Remove missile (TERP) (MHT Core)		5			

19.14.2.4.	Prepare TERP and missile for travel (MHT Core)		5			
19.14.2.5.	Remove TERP from Pylons					
19.14.2.6.	Perform emergency missile removal (TERP)					
19.15.	Launcher Environmental Shelter					
19.15.1.	Install			-	-	-
19.15.2.	Remove			-	-	-
19.16.	Proofload test facility operations	TO 33D9-68-30-1				
19.16.1.	Position and tie-down TE at the PLTF			-	-	-
19.16.2.	Remove TE from the PLTF			-	-	-
19.16.3.	Position and tie-down TERP at PLTF					
19.16.4.	Remove TERP from the PLTF					
20	**SUPPORT EQUIPMENT AND OFF-EQUIPMENT MAINTENANCE**					
20.1	Emergency response equipment	TOs TOs 21M-LGM30G-2-33; 21M-LGM30G-2-36 OO-ALC 91-1; LJGs 20AF-01-1, 20AF-01-2; Applicable Manufacturers Operation and Service Instructions; Win g emergency response plan				
20.1.1	Level A suit			-	-	-
20.1.1.1	Inspect (MAPS Core)		5	-	-	-
20.1.1.2	Use			-	-	-
20.1.2	Communications equipment					
20.1.2.1	Inspect			-	-	-
20.1.2.2	Operate			-	-	-
20.1.2.3	Service			-	-	-
20.2	Emergency breathing apparatus	TOs 14S5-16-1, 14S5-18-1, 14S5-30-2, 14S5-32-1; Applicable Manufacturers Operation and Service Instructions				
20.2.1	Perform periodic maintenance			-	-	-
20.2.2.	Troubleshoot			-	-	-
20.2.3.	Repair			-	-	-
20.3	Operate Self Contained Atmospheric Protective Ensemble (SCAPE)	TR: Local Training Course		-	-	-
20.4	Hand lift trucks	TOs 35M1-1-101, 36A12-24-3-1, 35M3-8-11-1				
20.4.1	Inspect			-	-	-
20.4.2	Service			-	-	-
20.4.3	Repair			-	-	-
20.4.4	Operate			-	-	-
20.5	LF hydraulically operated battery handling set	TOs 35M1-1-101, 33D9-68-30-1, 21MLGM30F-6WC-3, 21M-LGM30F-4-4				
20.5.1	Inspect			-	-	-
20.5.2	Service & Repair			-	-	-
20.5.3	Operate			-	-	-
20.5.4	Perform functional test			-	-	-
20.5.5	Proof load			-	-	-
20.6	Guided Missile Maintenance Platform (GMMP)	TOs 21M-LGM30G-2-10, 35A4-2-31-1, 35A4-4-9-1				
20.6.1	Function and description			A	B	-
20.6.2	Inspect (MAPS Core)		5	-	b	-
20.6.3	Install (MMT Core)		5	1b	-	-
20.6.4	Remove (MMT Core)		5	1b	-	-
20.6.5	Emergency Extraction			-	-	-
20.6.6	Operate (MMT Core)		5	1b	-	-
20.6.7	Service & Repair			-	-	-
20.6.8	Proof load using Support Structure Proof load Fixture (SSPLF) (MAPS Core)		5	-	b	-
20.6.9	Certify secondary brake on GMMP (MAPS Core)		5	-	-	-
20.7	GMMP Test Fixture	TO 35A4-4-9-1				

20.7.1	Inspect			-	-	-
20.7.2	Operate			-	-	-
20.7.3	Repair			-	-	-
20.7.4	Troubleshoot			-	-	-
20.8	Guidance and Control (G&C) Purging Manifold	TOs 33K-1-X, 35M1-1-101, 36A9-8-40-1, 42B5-1-2, 36A9-8-58-1, 21M-LGM30G-2-33				
20.8.1	Description			A	B	-
20.8.2	Inspect			-	-	-
20.8.3	Adjust			-	-	-
20.8.4	Repair			-	-	-
20.8.5	Operate			-	-	-
20.8.6	Replace nitrogen bottles			-	-	-
20.8.7	Troubleshoot			-	-	-
20.8.8	Perform component calibration procedures			-	-	-
20.8.9	Operate portable purge manifold			-	-	-
20.9	Hydraulic Pressure Charging Set	TOs 21M-LGM30G-2-28, 33K-1-X, 35M5-3-16-2, 42E1-1-1, 00-25-223, 21M-LGM30F-6-WC-3				
20.9.1	Description			-	B	-
20.9.2	Inspect			-	-	-
20.9.3	Service			-	-	-
20.9.4	Troubleshoot			-	-	-
20.9.5	Repair			-	-	-
20.9.6	Perform functional test			-	-	-
20.9.7	Operate			-	-	-
20.10.	Hydraulic Pusher Set	TO 21M-LGM30G-2-18, 21M-LGM30G-2 10, 35M27-3-11-1				
20.10.1	Description			A	B	-
20.10.2	Inspect (MAPS Core)		5	-	b	-
20.10.3	Operate (MMT Core)		5	1a	-	-
20.10.4	Service & Repair			-	b	-
20.10.5	Troubleshoot			-	-	-
20.10.6	Perform checkout			-	-	-
20.11	Compressed Gas Cylinder/Valve Assembly (CVA)	TOs 35M1-1-101, 21M-LGM30G-2-10				
20.11.1	Description			A	B	-
20.11.2	Operate			1a	-	-
20.11.3	Troubleshoot			-	-	-
20.11.4	Repair			-	-	-
20.12	Hydraulic Purge Set	TO 35D3-11-52-2				
20.12.1	Description			-	B	-
20.12.2	Operate			-	-	-
20.12.3	Repair			-	-	-
20.12.4	Troubleshoot			-	-	-
20.13	Translating/Leveling Jack Set	TOs 21M-LGM30F-2-2-1, 35A2-5-25-1, 35M19-3-26-1, 21M-LGM30F-2-17-1				
20.13.1	Inspect			-	-	-
20.13.2	Service			-	-	-
20.13.3	Operate			-	-	-
20.13.4	Repair			-	-	-
20.13.5	Troubleshoot			-	-	-
20.14	Hoisting Units, Adapters, and Slings	TOs 1-1A-8, 11N-HRV-522-2, 21M-LGM30F-4-X, 21M-LGM30G-2-33, 35M27-3- 8-1, 35M27-3-11-1; AFI 91-203, APPLICABLE MANUFACTURERS OPERATION AND SERVICE INSTRUCTIONS				

20.14.1	Inspect			1a	-	-
20.14.2	Repair			-	-	-
20.14.3	Proof load			-	-	-
20.15	RS Handling Fixture					
20.15.1	Inspect (MMT Core)		5	2b	-	-
20.15.2	Repair			-	-	-
20.15.3	Proof load			-	-	-
20.16	Proof Load Test Facility (PLTF)	TO 33D9-68-30-1; CEM 21-SM80X-2-26-X, 35R-1-481-X, 35R-1-581-X, 35R-1-681-X				
20.16.1.	Inspect (MAPS Core)		5	-	-	-
20.16.2.	Operate (MAPS Core)		5	-	-	-
20.16.3.	Perform operational checkout			-	-	-
20.16.4.	Troubleshoot			-	-	-
20.16.5.	Service			-	-	-
20.16.6.	Repair			-	-	-
20.16.7.	Proof load test facility operations	TO 33D9-68-30-1, 35D3-11-52-2, 35M3- 8-11-1, LJG20AF-95-001				
20.16.7.1.	Proof load test PT (MAPS Core)		5	-	-	-
20.16.7.2.	Proofload test M-Van Monorail Hoist			-	-	-
20.16.7.3.	Proofload test GMMP			-	-	-
20.16.7.4.	Transporter erector					
20.16.7.4.1	Checkout rigging			-	-	-
20.16.7.4.2	Checkout cable tension			-	-	-
20.16.7.4.3.	Proof load test hoist/sling rod			-	-	-
20.16.7.5.	Transporter erector replacement (TERP)					
20.16.7.5.1.	Checkout rigging			-	-	-
20.16.7.5.2.	Checkout cable tension			-	-	-
20.16.7.5.3.	Proof load test hoist/sling rod			-	-	-
20.17	Off-Equipment Maintenance					
20.17.1	Repair hand driven linear actuator	TOs 21M-LGM30F-2-19, 21M-LGM30G-2-10, 35M1-9-2-2		-	-	-
20.17.2	Secondary door	TOs 21M-LGM30F-2-19, 21M-LGM30G-2-10, 35M1-9-2-2				
20.7.2.1	Perform checkout			-	-	-
20.7.2.2	Adjust components			-	-	-
20.7.2.3	Repair			-	-	-
20.17.3	Security pit vault door	TOs 21M-LGM30F-2-19, 21M-LGM30G-2-10, 35M1-9-2-2				
20.17.3.1	Repair (MAPS Core)		5	-	-	-
20.17.3.2	Troubleshoot (MAPS Core)		5	-	-	-
21	**MAINTENANCE SUPPORT VEHICLES**					
21.1	Crane	AFI 91-203, TOs 35D36-1-102, 35D36-2-2, 36C3-5-15-1, 1-1A-8, Applicable Manufacturers Operation and Service Instructions.				
21.1.1	Inspect			-	-	-
21.1.2	Repair components			-	-	-
21.1.3	Troubleshoot components			-	-	-
21.2	Payload Transporter (PT)	TOs 21M-LGM30G-2-33, 36A9-8-58-1				
21.2.1	Description			A	B	-
21.2.2	Change tires (tractor and trailer)			-	-	-
21.2.3	PT Tractor					
21.2.3.1	Perform preoperational checkout (MMT Topside)		5	2b	-	-
21.2.3.2	Connect tractor to semitrailer			-	-	-
21.2.3.3	Disconnect tractor from semitrailer			-	-	-
21.2.3.4	Operate auxiliary power unit (MMT Topside)		5	2b	-	-

21.2.4	Semitrailer					
21.2.4.1	Perform periodic inspection (MAPS Core)		5	-	-	-
21.2.4.2	Repair			-	-	-
21.2.4.3	Perform preoperational checkout (MMT Topside)		5	2b	-	-
21.2.3.4.	Operate environmental control system (ECS) (MMT Topside)		5	2b	-	-
21.2.5	Hoist					
21.2.5.1	Inspect (MAPS Core)		5	-	-	-
21.2.5.2	Service			-	-	-
21.2.5.3	Repair			-	-	-
21.2.5.4	Operate (MMT Topside, MAPS Core)		5	2b	-	-
21.2.5.5	Troubleshoot			-	-	-
21.2.6	Pneumatic systems					
21.2.6.1	Inspect (MAPS Core)		5	-	-	-
21.2.6.2	Service & Repair			-	-	-
21.2.6.3	Troubleshoot			-	-	-
21.2.7	PT Preparation					
21.2.7.1	Prepare to load AVE			-	-	-
21.2.7.2	Prepare to unload AVE			-	-	-
21.2.7.3	Prepare to temporarily store AVE components			-	-	-
21.2.7.4	Prepare to transport after temporary storage of AVE components			-	-	-
21.2.7.5	Prepare PT for LF operations			2b	-	-
21.2.7.6	Prepare PT for departure from LF			2b	-	-
21.3.	Payload Transporter Replacement (PTR)	21M-LGM30G-2-36				
21.3.1.	Description				B	-
21.3.2.	Change tires (tractor and trailer)					
21.3.3.	PTR Tractor	21M-LGM30G-2-36				
21.3.3.1	Perform preoperational checkout (MMT Topside)		5			
21.3.3.2	Connect tractor to semitrailer					
21.3.3.3	Disconnect tractor from semitrailer					
21.3.3.4	Operate auxiliary power unit (MMT Topside)		5			
21.3.4	PTR Semitrailer	21M-LGM30G-2-36, 21M-LGM30G-14-3-1				
21.3.4.1	Perform periodic inspection (MAPS Core)		5			
21.3.4.2	Repair					
21.3.4.3.	Perform preoperational checkout (MMT Topside)		5			
21.3.4.4.	Operate environmental control system (ECS) (MMT Topside)		5			
21.3.4.5.	Perform break-in procedures of RSPS					
21.3.5.	PTR Hoist	21M-LGM30G-14-3-1, 21M-LGM30G-2-36				
21.3.5.1.	Inspect (MAPS Core)		5			
21.3.5.2.	Service					
21.3.5.3.	Repair					
21.3.5.4.	Operate (MMT Topside, MAPS Core)		5			
21.3.5.5.	Troubleshoot					
21.3.6.	PTR Preparation	21M-LGM30G-2-36				
21.3.6.1.	Prepare to load AVE					
21.3.6.2.	Prepare to unload AVE					
21.3.6.3.	Prepare to temporarily store AVE components					
21.3.6.4.	Prepare to transport after temporary storage of AVE components					
21.3.6.5.	Prepare PTR for LF operations					
21.3.6.6.	Prepare PTR for departure from LF					
21.4.	Transporter-Erector (TE)	TO 21M-LGM30F-2-2-1, 35A2-5-36-1, 35D3-11-52-X, 35E9-266-1				

21.4.1	Description			A	B	-
21.4.2	Change tires (tractor and trailer)			-	-	-
21.4.3	Operate Environmental Control Unit (ECU)			-	-	-
21.4.4	TE Tractor					
21.4.4.1	Perform preoperational checkout			-	-	-
21.4.4.2	Connect tractor to semitrailer			-	-	-
21.4.4.3	Disconnect tractor from semitrailer			-	-	-
21.4.5	Auxiliary power unit					
21.4.5.1	Inspect			-	-	-
21.4.5.2	Service			-	-	-
21.4.5.3	Operate			-	-	-
21.4.6	Tractor hydraulic system					
21.4.6.1	Inspect (MHT, MAPS Core)		5	-	-	-
21.4.6.2	Service			-	-	-
21.4.6.3	Repair			-	-	-
21.4.6.4	Perform trouble analysis			-	-	-
21.4.7	Semitrailer hydraulic system					
21.4.7.1	Inspect (MAPS Core)		5	-	-	-
21.4.7.2	Service			-	-	-
21.4.7.3	Repair			-	-	-
21.4.7.4	Perform preoperational checkout (MHT Core)		5	-	-	-
21.4.7.5	Operate			-	-	-
21.4.7.6	Troubleshoot			-	-	-
21.4.8	Missile emplacement system					
21.4.8.1	Inspect			-	-	-
21.4.8.2	Service			-	-	-
21.4.8.3	Repair			-	-	-
21.4.8.4	Perform operational checkout			-	-	-
21.4.8.5	Operate			-	-	-
21.4.8.6	Troubleshoot			-	-	-
21.4.8.7	Adjust components			-	-	-
21.4.8.8	Operate hand-held control unit			-	-	-
21.4.8.9	Troubleshoot hand-held control unit			-	-	-
21.5.	Transporter-Erector Replacement (TERP)	TOs 21M-LGM30G-2-2-1, 35A2-5-36-1, 35D3-11-55--X,				
21.5.1.	Description			-	B	-
21.5.2.	Change tires (tractor and trailer)			-	-	-
21.5.3.	Operate Environmental Control Unit (ECU)			-	-	-
21.5.4.	Tractor (TERP)					
21.5.4.1.	Perform preoperational checkout			-	-	-
21.5.4.2.	Connect tractor to semitrailer			-	-	-
21.5.4.3.	Disconnect tractor from semitrailer			-	-	-
21.5.5.	Auxiliary power unit (TERP)					
21.5.5.1.	Inspect			-	-	-
21.5.5.2.	Service			-	-	-
21.5.5.3.	Operate			-	-	-
21.5.6.	Tractor hydraulic system (TERP)					
21.5.6.1.	Inspect			-	-	-
21.5.6.2.	Service			-	-	-
21.5.6.3.	Repair			-	-	-
21.5.6.4.	Perform trouble analysis			-	-	-
21.5.7.	Semitrailer hydraulic system (TERP)					

21.5.7.1.	Inspect			-	-	-
21.5.7.2.	Service			-	-	-
21.5.7.3.	Repair			-	-	-
21.5.7.4.	Perform preoperational checkout			-	-	-
21.5.7.5.	Operate			-	-	-
21.5.7.6.	Troubleshoot			-	-	-
21.5.8.	Missile emplacement system (TERP)					
21.5.8.1.	Inspect			-	-	-
21.5.8.2.	Service			-	-	-
21.5.8.3.	Repair			-	-	-
21.5.8.4.	Perform operational checkout			-	-	-
21.5.8.5.	Operate			-	-	-
21.5.8.6.	Troubleshoot			-	-	-
21.5.8.7.	Adjust components			-	-	-
21.5.9.	Operate missile erector controller	TOs 21M-LGM30G-2-2-1, 35D3-11-55-2		-	-	-
21.5.10.	Troubleshoot missile erector controller	TO 35D3-11-55-2		-	-	-
21.6.	Portable Air Conditioner	TOs 21M-LGM30F-2-2-1, 35C2-3-370-1, 35C2-3-370-14, 35C2-3-493-1, 35E9-25-3, 35E9-37-2, 35E9-270-1				
21.6.1	Description			A	B	-
21.6.2	Inspect			-	-	-
21.6.3	Service & Repair			-	-	-
21.6.4	Perform preoperational checkout (MHT Core)		5	-	-	-
21.6.5	Perform trouble analysis			-	-	-
21.6.6	Operate			-	-	-
21.6.7	Load on to PAC trailer			-	-	-
21.6.8	Unload from PAC trailer			-	-	-
21.7.	Missile Transporter (MT)	TOs 21M-LGM30F-2-2-1, 35M4-3-7-1, 35C2-3-493-1				
21.7.1	Description			A	B	-
21.7.2	Connect tractor to semitrailer			-	-	-
21.7.3	Disconnect tractor from semitrailer			-	-	-
21.7.4	Perform semitrailer inspection			-	-	-
21.7.5	Operate engine generator set (MHT Core)		5	-	-	-
21.7.6	Perform engine generator set operational checkout			-	-	-
21.7.7	Inspect hydraulic system			-	-	-
21.7.8	Operate hydraulic system (MHT Core)		5	-	-	-
21.7.9	Perform hydraulic system operational checkout			-	-	-
21.7.10	Operate Environmental Control Unit (ECU) (MHT Core)		5	-	-	-
21.8.	Mechanical maintenance truck (M-Van)	TOs 36A2-3-94-4, 36A2-3-93-4, 35D4-7-4-2				
21.8.1.	Inspect mechanical maintenance truck			-	-	-
21.8.2.	Inspect monorail hoist			-	-	-
21.8.3.	Service & repar monorail hoist			-	-	-
21.8.4.	Operate monorail hoist			-	-	-
21.8.5.	Troubleshoot monorail hoist			-	-	-
21.9.	PMT Trailer	TOs 36A9-8-56-1, 36Y16-25-1, 33D9-68- 30-1				
21.9.1.	Inspect			-	-	-
21.9.2.	Service & Repair			-	-	-
22	**TRAINERS AND TRAINING DEVICES**					
22.1	Launch Facility Trainer (AN/GSQ-T8 and AN/GSQ-T9)	TO 43D2-3-27-1				
22.1.1.	Operate			-	-	-
22.1.2.	Perform startup			-	-	-
22.1.3.	Perform shutdown			-	-	-

22.1.4.	Perform emergency shutdown			-	-	-
22.2	Launch Facility Trainer (AN/GSQ-T10, AN/GSQ-T13, and AN/GSQ-T41)	TOs 43D2-3-55-1, 43D2-3-81-1				
22.2.1	Operate			-	-	-
22.2.2.	Perform startup			-	-	-
22.2.3.	Perform shutdown			-	-	-
22.2.4.	Perform emergency shutdown			-	-	-
22.3.	Environmental Control System/Power Procedures Trainer (A/F37FU-T19/T21/T22/T24/T25)	TOs 43D2-3-84-1, 43D2-3-85-1, 43D2-3- 89-1, 43D2-3-91-1, 43D2-3-92-1				
22.3.1	Operate			-	-	-
22.3.2.	Perform startup			-	-	-
22.3.3.	Perform shutdown			-	-	-
22.3.4.	Perform emergency shutdown			-	-	-
22.3.5.	Operate simulated electronic rack			-	-	-
22.3.6.	Operate DC power supply PS-5			-	-	-
22.3.7.	Operate load bank			-	-	-
22.4	Propulsion System Rocket Engine Trainer (A/A44A- 4T1)	TO 43D2-3-72-1				
22.4.1.	Repair			-	-	-
23	**OPERATIONAL TEST LAUNCH PROCEDURES**	**AFIs 99-1, 99-102, 99-103; AFMCI 21-102; TOs 21M-LGM30G-1-17, 33D9-61-108-1**				
23.1	Ordnance	TOs 21M-LGM30F-2-17-5, 11A15-1-167- 1, AFMAN 91-201				
23.1.1.	Transport			-	-	-
23.1.2.	Handle			-	-	-
23.2.	Launch Facility Maintenance					
23.2.1.	Operate portable diesel electric unit	CEM 21M-SM80-102		-	-	-
23.2.2.	Perform LF Site Inspection	576 FLTS OI 21-101		-	-	-
23.2.3.	Launcher Auxiliary Support Building (LASB)	TO 21M-LGM30F-2-17-9				
23.2.3.1.	Enter			-	-	-
23.2.3.2.	Exit			-	-	-
23.2.4	Launcher Closure Rail Lock	TO 21M-LGM30G-2-18				
23.2.4.1.	Install			-	-	-
23.2.4.2.	Remove			-	-	-
23.2.5.	MOD 7, MGS and PSRE at AS& I / LF	TOs 21M-LG30G-2-33, 21M-LGM30F-2-17-3, 21M-LGM30G-2-18				
23.2.5.1.	Mate			-	-	-
23.2.5.2.	Demate			-	-	-
23.2.6.	MOD 7 umbilical	TOs 21M-LGM30F-2-17-3, 21M-LGM30G-2-18				
23.2.6.1.	Connect at missile			-	-	-
23.2.6.2.	Disconnect at missile			-	-	-
23.2.7.	MOD 7 Instrumentation cables (P/J753-P748) Third stage to PSRE	TO 21M-LGM30F-2-17-3, 21M-LGM30F-2-17-5				
23.2.7.1.	Connect			-	-	-
23.2.7.2.	Disconnect			-	-	-
23.2.8.	Third stage PSS safe/arm actuator (AODS)	TOs 21M-LGM30F-2-17-3				
23.2.8.1.	Install			-	-	-
23.2.8.2.	Remove			-	-	-
23.2.9.	MOD 7 Umbilical at instrumentation box	TOs 21M-LGM30F-2-17-3, 21M-LGM30F-2-17-4				
23.2.9.1.	Connect			-	-	-
23.2.9.2.	Disconnect			-	-	-
23.3.9.3.	Troubleshoot			-	-	-
23.3.9.4.	Perform hazardous current/continuity checks			-	-	-
23.2.10.	Jumper NCU umbilical at LEPS rack	TO 21M-LGM30F-2-17-3				
23.2.10.1.	Connect			-	-	-

23.2.10.2.	Disconnect			-	-	-
23.2.11.	RS separation cables	TOs 21M-LGM30F-2-17-3, 11NRS12-2-2				
23.2.11.1	Connect			-	-	-
23.2.11.2.	Disconnect			-	-	-
23.2.12.	MOD 7 CTLI safing pins	TO 21M-LGM30F-2-17-3				
23.2.12.1.	Remove			-	-	-
23.2.12.2.	Install			-	-	-
23.2.13.	Command destruct antenna covers	TO 21M-LGM30F-2-17-3				
23.2.13.1.	Remove			-	-	-
23.2.13.2.	Install			-	-	-
23.2.14.	GPS/S-Band Fly Away Cables	TO 21M-LGM30F-2-17-3				
23.2.14.1.	Connect			-	-	-
23.2.14.2.	Disconnect			-	-	-
23.2.15.	Premature stage separation batteries at the LF	TO 21M-LGM30F-2-17-5				
23.2.15.1.	Install			-	-	-
23.2.15.2.	Remove			-	-	-
23.2.16.	Premature stage separation timers at the LF	TO 21M-LGM30F-2-17-5				
23.2.16.1.	Install			-	-	-
23.2.16.2.	Remove			-	-	-
23.2.17.	Launcher closure arrestor assembly	TOs 21-LG118A-2-28, 21M-LGM30G-2- 18, 21SM80B-2-26-5, 21SM80F-2-26: CEMs 33R1-771-1, 35R1-481-1, 35R1-581-5, 35R-1-681-1, 21SM118A-2-26-1				
23.2.17.1	Inspect			-	-	-
23.2.17.2	Service			-	-	-
23.2.17.3	Repair			-	-	-
23.2.17.4	Leak Test			-	-	-
23.2.17.5	Overhaul			-	-	-
23.2.17.6	Reset			-	-	-
23.2.17.7	Checkout			-	-	-
23.2.17.8	Rotation			-	-	-
23.2.17.9	Restoration			-	-	-
23.3.	Missile Handling Operations TE/TERP					
23.3.1.	Install first stage carriage aft band extension blocks	TO 21M-LGM30F-2-2-1		-	-	-
23.3.2.	Remove first stage carriage aft band extension blocks	TO 21M-LGM30F-2-2-1		-	-	-
23.3.3.	Perform Minuteman III missile safety check	TO 21M-LGM30F-2-17-5		-	-	-
23.3.4.	Perform Minuteman III missile receipt inspection	TO 21M-LGM30F-2-17-5		-	-	-
23.3.5.	Roll X-fer MSL from TE/TERP to MSB/MPF	TOs 21M-LGM30F-2-2-1, 21M-LGM30F-2-17-1, 21M-LGM30F-2-17-9, 35D3-11-52-2, 35D3-11-52-1, 21M-LGM30G-2-2-1				
23.3.5.1.	Pre-roll procedures			-	-	-
23.3.5.2.	Roll-transfer procedures			-	-	-
23.3.5.3.	Post-roll transfer procedures			-	-	-
23.3.5.4.	Pre-roll procedures using TERP			-	-	-
23.3.5.5.	Roll-transfer procedures using TERP			-	-	-
23.3.5.6.	Post-roll transfer procedures using TERP			-	-	-
23.3.6.	Roll X-fer MSL from MSB/MPF to TE/TERP	TOs 21M-LGM30F-2-2-1, 21M-LGM30F- 2-17-1, 21M-LGM30F-2-17-9, 35D3-11-52-2				
23.3.6.1.	Pre-roll transfer procedures			-	-	-
23.3.6.2.	Roll-transfer procedures			-	-	-
23.3.6.3.	Post-roll transfer procedures			-	-	-
23.3.6.4.	Pre-roll procedures using TERP			-	-	-
23.3.6.5.	Roll-transfer procedures using TERP			-	-	-
23.3.6.6.	Post-roll transfer procedures using TERP			-	-	-

23.3.7.	Roll X-fer MSL from MT to MSB/MPF	TOs 21M-LGM30F-2-2-1, 21M-LGM30F-2-17-1, 21M-LGM30F-2-17-9, 35D3-11-52-2, 33A1-12-1124-1				
23.3.7.1.	Pre-roll transfer procedures			-	-	-
23.3.7.2.	Roll-transfer procedures			-	-	-
23.3.7.3.	Post-roll transfer procedures			-	-	-
23.3.8.	Roll X-fer MSL from MSB/MPF to MT	TOs 21M-LGM30F-2-17-1, 21M-LGM30F-2-17-9, 21M-LGM30F-2-2-1, 35D3-11-52-2, 33A1-12-1124-1				
23.3.8.1.	Pre-roll transfer procedures			-	-	-
23.3.8.2.	Roll-transfer procedures			-	-	-
23.3.8.3.	Post-roll transfer procedures			-	-	-
23.3.9.	Perform MT empty rocket motor carriage handling using forklift and sling procedures	TO 21M-LGM30F-2-2-1		-	-	-
23.4	Missile Processing					
23.4.1.	Missile Raceway covers	TO 21M-LGM30F-2-17-5				
23.4.1.1	Install			-	-	-
23.4.1.2	Remove			-	-	-
23.4.2.	Vertical restraint bands	TO 21M-LGM30F-2-17-5				
23.4.2.1	Install			-	-	-
23.4.2.2	Remove			-	-	-
23.4.3.	Nozzle shipping links	TO 21M-LGM30F-2-17-5				
23.4.3.1	Install			-	-	-
23.4.3.2	Remove			-	-	-
23.4.4.	Missile work platform	TO 21M-LGM30F-2-17-5				
23.4.4.1	Install			-	-	-
23.4.4.2	Remove			-	-	-
23.4.5.	Missile destruct assemblies	TOs 21M-LGM30F-2-17-5, 11A15-1-167- 1				
23.4.5.1	Install			-	-	-
23.4.5.2	Remove			-	-	-
23.4.5.3	Perform hazardous current check	TO 21M-LGM30F-2-17-5		-	-	-
23.4.6.	Inadvertent separation destruct system					
23.4.6.1	Install components			-	-	-
23.4.6.2	Remove components			-	-	-
23.4.7.	Base adapter ring modification kit	TO 21M-LGM30F-2-17-5				
23.4.7.1	Install			-	-	-
23.4.7.2	Remove			-	-	-
23.4.8.	Operational missile support adapter ring	TO 21M-LGM30F-2-17-5				
23.4.8.1	Install			-	-	-
23.4.8.2.	Remove			-	-	-
23.4.9.	Modified missile support adapter ring	TO 21M-LGM30F-2-17-5				
23.4.9.1	Install			-	-	-
23.4.9.2.	Remove			-	-	-
23.4.10.	Premature stage separation safe arm device	TOs 21M-LGM30F-2-17-5, 11A15-1-167- 1, 33D9-108-11-1, 33D9-108-20-1				
23.4.10.1	Install			-	-	-
23.4.10.2	Remove			-	-	-
23.4.10.3	Checkout			-	-	-
23.4.11.	Premature stage separation batteries at the MPF	TOs 21M-LGM30F-2-17-5, 11A15-1-167- 1				
23.4.11.1.	Install			-	-	-
23.4.11.2.	Remove			-	-	-
23.4.11.3.	Checkout			-	-	-
23.4.12.	Premature stage separation timers at the MPF	TO 21M-LGM30F-2-17-5				
23.4.12.1.	Install			-	-	-

23.4.12.2.	Remove			-	-	-
23.4.12.3.	Checkout			-	-	-
23.4.13.	Perform missile electrical bonding checks	TO 21M-LGM30F-2-17-5		-	-	-
23.4.14.	Perform missile fault isolation/continuity checkout of LSS cable	TO 21M-LGM30F-2-17-5		-	-	-
23.4.15.	Align NCU umbilical clamp	TO 21M-LGM30F-2-17-5		-	-	-
23.4.16.	Perform missile continuity check of J745	TO 21M-LGM30F-2-17-5		-	-	-
23.4.17.	MOD 7 LSS cable	TO 21M-LGM30F-2-17-5				
23.4.17.1	Install			-	-	-
23.4.17.2.	Remove			-	-	-
23.4.18.	Checkout premature stage separation safe/arm actuator	TO 21M-LGM30F-2-17-5		-	-	-
23.4.19.	Premature stage separation inertia switch	TO 21M-LGM30F-2-17-5				
23.4.19.1	Install			-	-	-
23.4.19.2	Remove			-	-	-
23.4.19.3	Checkout			-	-	-
23.4.20.	Signal conditioner	TO 21M-LGM30F-2-17-5				
23.4.20.1	Install			-	-	-
23.4.20.2	Remove			-	-	-
23.4.20.3.	Checkout			-	-	-
23.5.	PSRE Processing					
23.5.1	Perform PSRE safety check	TO 21M-LGM30F-2-17-5		-	-	-
23.5.2	Perform PSRE receipt inspection	TO 21M-LGM30F-2-17-5, 21M-LG30G-2-33		-	-	-
23.5.3.	PSRE thermal insulation blanket and brackets	TO 21M-LGM30F-2-17-5, 2K-LR256-43				
23.5.3.1.	Install			-	-	-
23.5.3.2.	Remove			-	-	-
23.5.3.3.	Repair Themal Insulation Blanket			-	-	-
23.5.4.	PSRE destruct assemblies	TO 21M-LGM30F-2-17-5, 11A15-1-167-1				
23.5.4.1.	Install			-	-	-
23.5.4.2.	Remove			-	-	-
23.5.5.	PSRE instrumentation cable	TO 21M-LGM30F-2-17-5				
23.5.5.1.	Install			-	-	-
23.5.5.2	Remove			-	-	-
23.5.5.3	Perform fault isolation/continuity checkout			-	-	-
23.5.6.	PSRE command destruct safe/arm device	TOs 21M-LGM30F-2-17-5, 33D9-9-9-1, 33D9-108-20-1, 33D9-108-20-3 , 11A15-1-167-1				
23.5.6.1	Install			-	-	-
23.5.6.2	Remove			-	-	-
23.5.6.3	Checkout			-	-	-
23.5.7.	PSRE SE339A/HRU-1126/A Cable	TO 21M-LGM30F-2-17-5				
23.5.7.1.	Install			-	-	-
23.5.7.2.	Remove			-	-	-
23.5.7.3.	Checkout fault isolation/continuity			-	-	-
23.5.8.	Perform PSRE hazardous current check	TO 21M-LGM30F-2-17-5		-	-	-
23.5.9.	Perform PSRE electrical bonding checks	TO 21M-LGM30F-2-17-5		-	-	-
23.5.10.	Checkout PSRE operational pressure transducers	TO 21M-LGM30F-2-17-5		-	-	-
23.6	Test Equipment					
23.6.1.	Missile System Components Test Set	TO 33D9-9-1				
23.6.1.1.	Inspect			-	-	-
23.6.1.2.	Operate			-	-	-
23.6.2.	Safety and Arming Device Test Set	TO 33D9-108-20-3				
23.6.2.1.	Inspect			-	-	-

23.6.2.2.	Operate			-	-	-
23.6.3.	Pressure Transducer Test Set	TO 21M-LGM30F-2-17-5				
23.6.3.1.	Inspect			-	-	-
23.6.3.2.	Operate			-	-	-
23.6.4.	Electrical Cable Test Set (AN/DSM-91)	TO 21M-LGM30F-2-17-5				
23.6.4.1.	Inspect			-	-	-
23.6.4.2.	Operate			-	-	-
23.6.5.	Electrical Cable Test Set (A/E24T-302)	Contractor Source Data - D2-29682-1				
23.6.5.1.	Inspect			-	-	-
23.6.5.2.	Operate			-	-	-
23.7	Support Equipment					
23.7.1	Equipment crane	TOs 34M-3-24-1, 36M-3-24-11, 45C3-5- 24-1, 35L3-5-15-15, 36C3-5-11-1				
23.7.1.1.	Inspect cables			-	-	-
23.7.1.2.	Remove cables			-	-	-
23.7.1.3	Install cables			-	-	-
23.7.2.	D6A hydraulic test stand	TOs 33A2-2-6-51, 33A2-2-23, 21M-LGM30X-2-18				
23.7.2.1	Inspect			-	-	-
23.7.2.2	Service			-	-	-
23.7.2.3	Perform pre-operational procedures			-	-	-
23.7.2.4	Repair			-	-	-
23.7.2.5	Operate			-	-	-
23.7.3.	Missile transfer winch set CTL	TO 35D4-2-45-1				
23.7.3.1	Inspect			-	-	-
23.7.3.2	Service			-	-	-
23.7.3.3	Repair			-	-	-
23.7.3.4	Perform functional checkout			-	-	-
23.7.4.	Ballistic end clamp	TO 33D9-68-30-1				
23.7.4.1.	Inspect			-	-	-
23.7.4.2.	Proof load			-	-	-
23.7.5.	Base Adapter Ring Hoist Fittings (LF 04 & 09)	TO 21M-LGM 30F-2-17-3				
23.7.5.1.	Install			-	-	-
23.7.5.2.	Remove			-	-	-
23.7.6.	NCU cable assembly hoist clamp	TO 33D9-68-30-1				
23.7.6.1.	Inspect			-	-	-
23.7.6.2	Proof load			-	-	-
23.7.7.	Lock removal rod	TO 33D9-68-30-1				
23.7.7.1	Inspect			-	-	-
23.7.7.2.	Proof load			-	-	-
23.7.8.	Four-person work basket	TO 33D9-68-30-1				
23.7.8.1.	Inspect			-	-	-
23.7.8.2	Proof load			-	-	-
23.7.9.	Two-person work basket	TO 33D9-68-30-1				
23.7.9.1.	Inspect			-	-	-
23.7.9.2.	Proof load			-	-	-
23.7.10.	Work platform	TO 33D9-68-30-1				
23.7.10.1	Inspect			-	-	-
23.7.10.2	Proof load			-	-	-
23.7.11.	Barrel sling	TO 33D9-68-30-1				
23.7.11.1.	Inspect			-	-	-
23.7.11.2.	Proof load			-	-	-
23.7.12.	Stabilizer chain assembly	TO 33D9-68-30-1				

23.7.12.1.	Inspect			-	-	-
23.7.12.2.	Proof load			-	-	-
23.7.13.	Simulator work cage	TO 33D9-68-30-1				
23.7.13.1.	Inspect			-	-	-
23.7.13.2.	Proof load			-	-	-
23.7.14.	Electric motor driven hydraulic test stand (HIP-E-1)	TOs 33A2-2-87-1, 21M-LGM30G-2-18				
23.7.14.1.	Inspect			-	-	-
23.7.14.2.	Service			-	-	-
23.7.14.3.	Preoperational Checkout			-	-	-
23.7.14.4.	Repair			-	-	-
23.7.14.5.	Operate			-	-	-
24	**VEHICLE AND EQUIPMENT CONTROL**					
24.1.	Vehicles	AFI 24-3-2 / AFMAN 24-306				
24.1.1.	Maintain vehicle forms/records			-	-	-
24.1.2.	Maintain vehicle accountability			-	-	-
24.1.3.	Issue/receive vehicles			-	-	-
24.1.4.	Perform preoperational checkout of:					
24.1.4.1.	Payload transporter (PT)	TOs 21M-LGM30G-2-33, 36A9-8-58-1		-	-	-
24.1.4.2.	Payload transporter Replacement (PTR)	21M-LGM30G-2-36		-	-	-
24.1.4.3.	Mechanical maintenance truck	TOs 21M-LGM30G-2-10, 35D4-7-4-2, 36A12-24-3-1, 21M-LGM30F-2-17-9; Owner's Manual		-	-	-
24.1.4.	Perform daily inspection of:					
24.1.4.1.	Perform daily inspection general purpose vehicles;	AFI 24-302 / TO 36-1-191		2b	-	-
24.1.4.2.	Perform daily inspection of special purpose vehicles	TOs 36A12-24-3-1, 36A13-31-1, 21M-LGM30G-2-33		-	-	-
24.2	Equipment	AFI 24-301				
24.2.1	Maintain equipment accountability	TO 36-1-191		-	-	-
24.2.2.	Perform explosive set circuitry test set self- test	TO 33D9-38-15-21		-	-	-
24.2.3.	Inspect nuclear-certified equipment for servicability	MNCL, 11N-HRV-5022-2		2b	-	-
24.2.4.	Verify/update equipment status using MIS or TAS;	MIS or TAS User's Guide		-	-	-
24.2.5.	Equipment issue/receipt					
24.2.5.1.	Inspect equipment for general servicability	Applicable equipment TO		2b	-	-
24.2.5.2.	Configure vehicles with equipment for dispatch	Applicable weapon system TO; load list		2b	-	-
24.2.5.3.	Issue/receive equipment using MIS or TAS;	MIS or TAS User's Guide		-	-	-
24.3	Nitrogen bottles	TOs 35M1-1-101, 42B5-1-1-2; AFMAN 91-203				
24.3.1.	Maintain nitrogen bottles			-	-	-
24.3.2.	Install/remove in purge manifold			-	-	-
24.3.3.	Perform purge manifold checkout			-	-	-
24.4.	Equipment recovery	TOs 00-25-234, 00-24-245, 1-1A-8, 11N-HRV-5022-2				
24.4.1	Repair equipment			-	-	-
24.4.2.	Process equipment for disposition/maintenance			-	-	-
24.4.2	Fabricate local manufactured equipment			-	-	-
25	**MISSILE MAINTENANCE OPERATIONS CENTER (MMOC)**					
25.1	Understand site security requirements	AFGSCI 31-101		-	-	-
25.2	Evaluate/respond to reports from LFs/MAFs;	TO 21M-LGM30X-2-1-X		-	-	-
25.3	Understand large maintenance vehicle operations			-	-	-
25.4	Understand the maintenance priority system			-	-	-

25.5	Monitor, update, and delete maintenance data			-	-	-
25.6	Coordinate with Materiel Control on priority changes, PMCS, NMCS, and MICAP conditions			-	-	-
25.7	Coordinate unscheduled dispatches	TO 33D9-61-76-1		-	-	-
25.8	Maintain site logs using NMC2			-	-	-
25.9	Maintain senior controller logs using NMC2			-	-	-
25.10	Conduct daily GMR/MOSR cross-check			-	-	-
25.11	Monitor critical equipment and vehicle status	TO 33D9-61-76-1		-	-	-
25.12	Coordinate with BCE on RPIE maintenance requirements and interruptions of normal commercial power			-	-	-
25.13	Coordinate and document airborne launch and controlsystems tests	TO 21M-LGM30X-2-1-X, ALCC Log		-	-	-
25.14	Coordinate and document code change action	TO 21M-LGM30G-2-1-X, AFGSCI 13-5301V5		-	-	-
25.15	Coordinate and document cannibalization procedures	TO 00-20-2, 33D9-61-76-1		-	-	-
25.16	Report wing status	AFI 21-103, MCR		-	-	-
25.17	Use secure communication equipment			-	-	-
25.18	Process official incoming/outgoing communications			-	-	-
25.19	Operate ECS Remote Monitoring System (ERMS)	TO 21M-LGM30F-2-5-8		-	-	-
25.20	Operate Remote Environmental Control System (RECS) (576 FLTS)	TO 21M-LGM30F-2-30-1		-	-	-
25.21	Operate remote visual assessment (RVA) system			-	-	-
25.22	Use checklists to:					
25.22.1	Respond to disaster situations			-	-	-
25.22.2	Coordinate PSRE movements/emergency actions			-	-	-
25.22.3	Coordinate missile movements/emergency actions			-	-	-
25.22.4	Coordinate RS movements/emergency actions			-	-	-
25.22.5	Coordinate emergency procedures			-	-	-
25.22.6	Coordinate missile potential hazards (MPH)			-	-	-
25.23	Classified material/information					
25.23.1	Process, protect, and destroy			-	-	-
25.23.2	Handle, store, and account			-	-	-
26	**PLANS AND SCHEDULING**	**AFMAN 21-202, 21-200**				
26.1	Maintenance Schedules					
26.1.1.	Prepare and maintain quarterly maintenance plan			-	-	-
26.1.2.	Prepare weekly utilization and maintenance plan			-	-	-
26.1.3	Conduct weekly scheduling meeting			-	-	-
26.1.4	Prepare daily utilization and maintenance plan			-	-	-
26.1.5	Conduct daily scheduling meeting			-	-	-
26.2.	Plan and coordinate					
26.2.1	Simulated Electronic Launches			-	-	-
26.2.2.	Hardness Surveillance Electromagnetic Pulse (HSEP) tests			-	-	-
26.2.3.	Code change / OLYMPIC STEP			-	-	-
26.2.4.	TCTO/MCL modification program			-	-	-
26.2.5.	EWO generation meeting			-	-	-
26.2.6.	Periodic maintenance program			-	-	-
26.2.7.	Programmed Depot Maintenance (PDM) programs			-	-	-
26.2.8.	NST Inspection support			-	-	-
26.3	AVDO	AFI 21-103				
26.3.1	Coordinate Missile Shipment requirements with Depot			-	-	-
26.3.2.	Prepare documents for outgoing shipment			-	-	-
26.3.3.	Verify Booster configuration for shipment			-	-	-
26.3.4.	Receive incoming booster			-	-	-
26.3.5.	Email Change Reports			-	-	-
26.3.6.	File electronic/hardcopy documents			-	-	-

26.4.	Scheduling Programs					
26.4.1	Develop daily work packages			-	-	-
26.4.2.	Manage job standard transactions (JSTs)			-	-	-
26.4.3.	Manage Maintenance Scheduling Effectiveness program			-	-	-
26.4.4.	Complete/coordinate AF Form 2407			-	-	-
26.5.	Reentry systems					
26.5.1	Run Line 100 checklist			-	-	-
26.5.2.	Build RS movement briefing			-	-	-
26.5.3.	Execute meeting/distribute slides			-	-	-
26.6.	Site files	TO 00-20-1, AFMAN 21-202				
26.6.1	Maintain site files			-	-	-
26.6.2	Process AFTO Form 95s			-	-	-
26.6.3	Process physical inventory sheets			-	-	-
26.6.4	Process AFTO Form 430s			-	-	-
27	**QUALITY ASSURANCE**	**AFMAN 21-200, AFMAN 21-202**				
27.1	Inspections					
27.1.1.	Conduct management inspections			-	-	-
27.1.2.	Conduct quality verification inspections			-	-	-
27.1.3.	Conduct activity inspections			-	-	-
27.1.4.	Conduct special inspections			-	-	-
27.1.5.	Oversee one-time inspections	TO 00-20-1		-	-	-
27.2.	Proficiency evaluations	AFMAN 21-200				
27.2.1	Conduct personnel proficiency evaluations			-	-	-
27.2.2	Conduct trainer proficiency evaluations			-	-	-
27.2.3	Document evaluations/inspection results			-	-	-
27.3.	Technical data	AFPD 21-3; TOs 00-5-1, AFGSCIs 32-1005, 32-1009				
27.3.1	Review new/revised technical data			-	-	-
27.3.2	Review local publications/instructions			-	-	-
27.3.3	Review approved AFTO 22/AFGSC 272s			-	-	-
27.4.	Training					
27.4.1	Conduct QA Orientation Course			-	-	-
27.4.2	Conduct Deficiency Reporting course			-	-	-
27.4.3.	Review local lesson plans/training outlines			-	-	-
27.5.	Product Improvement Program	AFMAN 21-200				
27.5.1	Process deficiency reports	TO 00-35D-54. AFMAN 23-122		-	-	-
27.5.2	Process technical data changes (AFTO 22s/AFGSC 272s)			-	-	-
27.5.3	Process modification proposals (AF 1067)	AFI 91-103		-	-	-
27.5.4	Conduct review of TCTOs/MCLs			-	-	-
27.5.5	Coordinate Technical Assistance Requests (TAR)	TO 00-25-107		-	-	-
27.5.6	Coordinate Maintenance Assistance Requests (MAR)	TO 00-25-107		-	-	-
27.6.	Review MMOC checklists			-	-	-
28	**ICBM DEPOT TASKS**					
28.1	Perform missile transfer and tiedown procedures for:	TOs 21M-LGM30B-2-26, 21M-LGM30F- 3-3, 21M-LGM30B-2-2, 21M-LGM30B-2-25, 35A2-5-25-1, 36A-2-14-2				
28.1.1.	Operational carriages			-	-	-
28.1.2.	Storage carriages			-	-	-
28.2	Rocket motor semi-trailer (RMS) transport tiedown procedures	TOs 21M-LGM30B-2-26, 36A9-11-3-31, 36A9-11-3-15, 35A-4-2-41-1, 2K-SR-55-3, 2K SR-56-3, 2K-SR-73-3, 2K-SR-57-3, 21M-LGM30B-2-25, 35AR-2-41-1; AFI 9 1-409; OGDEN AFMC 136-2				
28.2.1.	Perform tractor/trailer suspension operation procedures			-	-	-
28.2.2.	Conduct RMS environmental control operation procedures			-	-	-

28.2.3.	Perform RMS leveling procedures			-	-	-
28.2.4.	Conduct procedures to transport to and download at disposal area			-	-	-
28.2.5.	Perform operational carriage handling and tie down procedures			-	-	-
28.2.6.	Conduct end ring and bogie wheels 1st stage handling and tie down procedures			-	-	-
28.2.7.	Perform universal carriage handling and tie down procedures			-	-	-
28.2.8.	Perform storage carriage tie down procedures			-	-	-
28.2.9.	Perform end ring tie down procedures for LGM30F and G 2nd and 3rd stages			-	-	-
28.2.10.	Conduct visual rocket motor inspection for shipping and receiving			-	-	-
28.2.11.	Onload/Offload carriages onto/from RMS			-	-	-
28.2.12.	Onload/Offload carriages onto/from flatbed trailer			-	-	-
28.3.	Missile carriages					
28.3.1.	Minuteman carriage proof load	TO 21M-LGM30F-22-4-5-1				
28.3.1.1.	Operational Carriages			-	-	-
28.3.1.2.	Storage Carriages			-	-	-
28.3.1.3.	Universal Carriages			-	-	-
28.3.2.	Service Minuteman storage carriages	TO 21M-LGM30F-22-4-5-1				
28.3.2.1.	Stage I			-	-	-
28.3.2.2.	Stage II			-	-	-
28.3.2.3.	Stage III			-	-	-
28.3.3.	Minuteman missile carriage change	TO 21M-LGM30B-2-26				
28.3.3.1	Perform operational carriage inspection procedures			-	-	-
28.3.3.2	Perform storage carriage inspection procedures			-	-	-
28.3.3.3	Perform carriage change out procedures			-	-	-
28.4.	Perform M-bar procedures	TO 21M-LGM30F-2-26				
28.4.1.	Install			-	-	-
28.4.2.	Remove			-	-	-
28.5.	Motor horizontal/vertical restraint procedures	TOs 21M-LGM30B-2-26, 2K-SRM57-3, 2K-SRM56-3, 2K-SR55-3, 2K-SR19-3, 2K-SR73-2				
28.5.1.	Perform 1st stage installation/removal procedures			-	-	-
28.5.2.	Perform LGM30B, F, and G 2nd stage installation/removal procedures			-	-	-
28.5.3.	Perform LGM30B, F, and G 3rd stage installation/removal procedures			-	-	-
28.6	Hoisting procedures	TOs 21M-LGM30B-2-26, 2K-SRM55-3, 2K-SRM56-3, 2K-SRM57-3, 2K-SR19-3, 2K-SR73-3: AFI 91-409				
28.6.1.	Perform 1st stage lifting I-beam procedures			-	-	-
28.6.2.	Perform 1st stage nylon straps/spreader bar procedures			-	-	-
28.6.3.	Perform 1st stage cable lifting sling (fired case) procedures			-	-	-
28.6.4.	Perform 2nd stage lifting I-beam procedures			-	-	-
28.6.5.	Perform 2nd stage nylon straps with spreader bar procedures			-	-	-
28.6.6.	Perform 3rd stage H-frame sling procedures			-	-	-
28.6.7.	Perform 3rd stage adjustable cable assembly procedures			-	-	-
28.6.8.	Perform 3rd stage nylon straps with spreader bar procedures			-	-	-
28.6.9.	Perform missile booster sling procedures			-	-	-
28.6.10.	Perform operation of facility hoist (10 Ton and 50 Ton)			-	-	-
28.7	Freon collection tank	TO 21M-LGM30F-2-26; Test Directive; AFMC Form 206				
28.7.1.	Install			-	-	-
28.7.2.	Remove			-	-	-
28.8	Static firing facility procedures	TOs 22D9-144-5-1, 2K-SRM55-2-11, 2K-SRM56-3, 2K-SRM56-11, 2K-SRM57-3, 2K-SRM57-11, 33D9-114-5-1; Test Directives; AFMC Form 206				
28.8.1	Perform universal test fixture stand installation and alignment			-	-	-
28.8.2	Perform rocket motor installation/removal for all stages			-	-	-
28.8.3	Perform rocket motor alignment procedures			-	-	-

28.8.4	Perform roller adjustment (universal test fixture)			-	-	-
28.8.5	Perform transit function/operation			-	-	-
28.9	HAZARD PAD - stand and motor installation and removal	TOs 21M-LGM30B-2-26, 33D9-114-5-1				
28.9.1	Minuteman Stage I			-	-	-
28.9.2.	Minuteman F/G Stage II			-	-	-
28.9.3.	Minuteman F Stage III			-	-	-
28.9.4.	Minuteman G Stage III			-	-	-
28.10.	Leak check for static motor test	TO 2K-SRM55-11, 2K-SRM56-11, 2K-SRM57-11, 2K-SR119-3				
28.10.1.	Minuteman Stage I			-	-	-
28.10.2.	Minuteman F/G Stage II			-	-	-
28.10.3.	Minuteman F Stage III			-	-	-
28.11	Nitrogen service cart	TO 33D9-84-10-1				
28.11.1.	Inspect			-	-	-
28.11.2.	Service			-	-	-
28.11.3.	Operate			-	-	-
28.12	Exudate clean-up and packaging	TO 2K-SRM57-3		-	-	-
28.13	Minuteman B stage II strip for disposal	TO 2K-SRM56-3				
28.13.1.	Safe/arm igniter removal, separation and packaging			-	-	-
28.13.2.	Nozzle Control Unit and Nozzle Removal			-	-	-
28.14	Disposal of Minuteman rocket motors at thermal treatment unit	TO 21M-LGM30B-2-26, AFMAN 91-201				
28.14.1.	Transport			-	-	-
28.14.2.	Offload			-	-	-
28.15	Disposal of scrap propellant at thermal treatment unit	TO 21-LGM30B-2-26, AFMAN 91-201				
28.15.1.	Upload			-	-	-
28.15.2.	Transport			-	-	-
28.15.3.	Offload			-	-	-
28.16	Proof load facility	TO 21M-LGM30F-1-17; Test Directives				
28.16.1.	Stage II lifting lug proof load			-	-	-
28.16.2.	Stage III lifting lug proof load			-	-	-
28.16.3	Missile booster sling			-	-	-
28.16.4	Facility crane (10 Ton and 50 Ton)			-	-	-
28.16.5	Tower assembly proof load system			-	-	-
28.16.6	Minuteman missile suspension proof load kit			-	-	-
28.16.7	Slings			-	-	-
28.16.8	Lockpin Pulldown Kit			-	-	-
28.17.	Hydraulic power unit					
28.17.1.	Inspect			-	-	-
28.17.2.	Service			-	-	-
28.17.3.	Operate			-	-	-
28.18	Perform operational pressure transducer installation	TOs 21M-LGM30B-2-26, 2K-SRM53-3, 2K-SRM55-11, 2K-SR19-11, 2K-SR73-3; Test Directives				
28.18.1.	LGM30B/F/G 1st Stage			-	-	-
28.18.2.	LGM30B/F/G 2nd Stage			-	-	-
28.18.3.	LGM30B/F/G 3rd Stage			-	-	-
28.19.	Receive, roll transfer, carriage change, and ship Minuteman rocket motors	TO 21M-LGM30B-2-26, TEST DIRECTIVES, LOCAL PROCEDURES				
28.19.1	Minuteman Stage I			-	-	-
28.19.2.	Minuteman Stage II			-	-	-
28.19.3.	Minuteman Stage III			-	-	-
28.19.4	Minuteman Booster			-	-	-
28.20.	Oasis/HAFB Peacekeeper Operations					
28.20.1	Transport Vehicle/Trailer Inspection	TOs 21M-LGM118A- 2-26, 2K-SR118-3, 2K-SR119-3, 2K-SR120-3				

28.20.1.1.	Peacekeeper Transport Tractor Preoperational Checkout			-	-	-
28.20.1.2.	Solid State Transporter Preoperational Checkout			-	-	-
28.20.1.3.	Type II Trailer Preoperational Checkout			-	-	-
28.20.2.	Peacekeeper Motor Handling	TOs 21M-LGM118A-2-26, 2K-SR118-3, 2K-SR119-3, 2K-SR120-3				
28.20.2.1.	Remove/Install T&H Rings Stage I			-	-	-
28.20.2.2.	Remove/Install T&H Rings Stage II			-	-	-
28.20.2.3.	Remove/Install T&H Rings Stage III			-	-	-
28.20.3.	Peacekeeper Storage End Rings	TOs 21M-LGM118A-2-26, 2K-SR118-3, 2K-SR119-3, 2K-SR120-3				
28.20.3.1.	Remove/Install Storage End Rings Stage I			-	-	-
28.20.3.2.	Remove/Install Storage End Rings Stage II			-	-	-
28.20.3.3.	Remove/Install Storage End Rings Stage III			-	-	-
28.20.4.	Peacekeeper Rings Onload/Offload	TOs 21M-LGM118A- 2-26, 2K-SR118-3, 2K-SR119-3, 2K-SR120-3				
28.20.4.1.	Peacekeeper Rings into Type II			-	-	-
28.20.4.2.	Peacekeeper onload/offload on/from Flatbed			-	-	-
28.20.5.	Peacekeeper Roll Transfer	TOs 21M-LGM118A- 2-26, 2K-SR118-3, 2K-SR119-3, 2K-SR120-3				
28.20.5.1.	Peacekeeper Stage I Roll Transfer			-	-	-
28.20.5.2.	Peacekeeper Stage II Roll Transfer			-	-	-
28.20.5.3.	Peacekeeper Stage III Roll Transfer			-	-	-
28.21.	Propellant Dissection Dollies	TO 21M-LGM30B-2-26				
28.21.1.	Load			-	-	-
28.21.2.	Offload			-	-	-
28.21.3.	Transport			-	-	-
28.22.	Supervision					
28.22.1.	Analyze and resolve irregular occurrences during					
28.22.1.1.	Minuteman missile and rocket motor roll transfer procedures	TOs 21M-LGM30B-2-26, 21M-LGM30F- 3-3, 21M-LGM30B-2-2, 21M-LGM30B-2-25, 35A2-5-25-1, 36A-2-14-2		-	-	-
28.22.1.2.	Carriage change operations	TO 21M-LGM30B-2-26		-	-	-
28.22.1.3.	Certify configuration of Minuteman missile and rocket motors for shipment	TOs 21M-LGM30B-2-26, 36A9-11-3-31, 36A9-11-3-15, 35A-4-2-41-1, 2K-SR-55-3, 2K SR-56-3, 2K-SR-73-3, 2K-SR-57-3, 21M-LGM30B-2-25, 35AR-2-41-1; AFI 91-49; OGDEN AFMC 136-2		-	-	-
28.22.1.4.	Certify configuration of Peacekeeper motors for shipment	TOs 21M-LGM30B-2-26, 36A9-11-3-31, 36A9-11-3-15, 35A-4-2-41-1, 2K-SR-55-3, 2K SR-56-3, 2K-SR-73-3, 2K-SR-57-3, 21M-LGM30B-2-25, 35AR-2-41-1; AFI 91-49; OGDEN AFMC 136-2		-	-	-
28.22.1.4.1.	SR-119			-	-	-
28.22.1.4.2.	SR-118			-	-	-
28.22.1.5.	Support outside agencies during engineering of new and modified workloads	TR: TOs 21M-LGM30B-2-26, 21-LG118A-2-26, 21M-AGM86-1-1		-	-	-
28.22.2.	Supervise personnel during					
28.22.2.1.	Minuteman missile and rocket motor transfer	TOs 21M-LGM30B-2-26, 21M-LGM30F- 3-3, 21M-LGM30B-2-2, 35A2-5-25-1, 36A-2-14-2, 21M-LGM30B-2-25		-	-	-
28.22.2.2.	Carriage change operations	TO 21M-LGM30B-2-26		-	-	-
28.22.3.	Assess workload and personnel requirements to plan weekly work schedules			-	-	-
29	**ICBM CODES VAULT**					
29.1	Procedures					
29.1.1	Lock/Alarm class A vault door	AFI 31-209, TO 00-20F-2, EAP- STRAT VOLUME 16, AFGSCI 13- 5301V5		-	-	-
29.1.2	Maintain security of division containers, locks/combinations	AFPD 31-1, 31-4, AFI 31-401, EAP- STRAT VOLUME 16		-	-	-
29.1.3	Maintain visitor control	EAP-STRAT VOLUME 16, AFMAN 37-139, AFGSCI 13-5301V5		-	-	-
29.1.4.	Maintain code controller operations records	EAP-STRAT VOLUME 16, AFGSCI 13-5301V5		-	-	-
29.2.	Comply with system control/requirements for:	EAP-STRAT VOLUME 16, AFGSCI 13-5301V5				
29.2.1	WCPS			-	-	-
29.2.2	20 year spares			-	-	-
29.2.3	HCVE			-	-	-

29.2.4	Master CDs			-	-	-
29.2.5	LCP/keys			-	-	-
29.2.6	LEP			-	-	-
29.2.7	CCV/CSD(M)			-	-	-
29.2.8	P Plug			-	-	-
29.2.9	LFLCD (CL/CC/PEN-D)			-	-	-
29.2.10	Encryption System components			-	-	-
29.2.11	Program CDs			-	-	-
29.2.12	Target materials and execution plans	AFI 10-1102		-	-	-
29.2.13	TDIs			-	-	-
29.2.14	CSD(G)			-	-	-
29.2.15	IMU tapes			-	-	-
29.2.16	MGS Parameters data			-	-	-
29.2.17	Data Transfer Unit (DTU)			-	-	-
29.2.18	Tape transport (C-164A)			-	-	-
29.2.19	MCU			-	-	-
29.2.20	MGS computer			-	-	-
29.2.21	WCPS computer			-	-	-
29.2.22	Sum check controls			-	-	-
29.2.23	Off base training LF			-	-	-
29.2.24	Test components/SELM/HSEP			-	-	-
29.2.25	Code change procedures			-	-	-
29.2.26	Failed WCPS components			-	-	-
29.2.29	WSP			-	-	-
29.2.28	Worldwide Unlock Code (WWUC) Change	USSTRATCOM OPLAN 8044		-	-	-
29.3	Record Keeping & Documentation	AFIs 33-322, 37-138, EAP-STRAT VOLUME 16, AFGSCI 13-5301V5				
29.3.1	Establish and maintain files			-	-	-
29.3.2	File and locate records			-	-	-
29.3.3	Classify and control records			-	-	-
29.3.4	Maintain component control records			-	-	-
29.3.5	Maintain WCPS operation records			-	-	-
29.3.6	Maintain receipt/disposition records			-	-	-
29.4	Perform reporting and emergency response capability/procedures:					
29.4.1	Possible Code Compromise (PCC)	EAP-STRAT VOLUME 16 APPENDIX A, EAP-STRAT VOLUME 16, AFGSC 13-5301V5		-	-	-
29.4.2	Two-person concept violations	AFIs 91-101, 91-104		-	-	-
29.4.3	Single flight/Emergency Combat Capability (ECC)	AFI 91-114; EAP-STRAT VOLUME 16 APPENDIX A		-	-	-
29.4.4	Lateral coding	EAP-STRAT VOLUME 16 APPENDIX A		-	-	-
29.4.5	Emergency evacuation/destruction	EAP-STRAT VOLUME 16 APPENDIX A		-	-	-
29.4.6	Violations of code handling procedures	EAP-STRAT VOLUME 16 APPENDIX A, EAP-STRAT VOLUME 16		-	-	-
29.4.7	Possible compromise to Tamper Detection Indicator (TDI) technology	EAP-STRAT VOLUME 16 APPENDIX A, EAP-STRAT VOLUME 16		-	-	-
29.4.8	Codes Related Events (CRE)	EAP-STRAT VOLUME 16, AFGSCI 13-5301V5		-	-	-
29.5	Code components, programs, and misc. materials	EAP-STRAT VOLUME 16, AFGSCI 13-5301V5				
29.5.1	Receipt for materials			-	-	-
29.5.2	Store materials			-	-	-
29.5.3	Inventory materials			-	-	-
29.5.4	Dispose of materials			-	-	-
29.5.5	Transfer materials			-	-	-
29.5.6	Identify, classify, and mark materials	AFI 31-401		-	-	-

29.6	Field Configuration Requirements	EAP-STRAT VOLUME 16, AFGSCI 13-5301V5				
29.6.1	Operational/test code configuration					
29.6.1.1	Monitor code requirements/status			-	-	-
29.6.1.2	Coordinate job requirements			-	-	-
29.6.1.3	Maintain work status boards			-	-	-
29.6.2	Team dispatch/recovery	EAP-STRAT VOLUME 16, AFGSCI 13-5301V5				
29.6.2.1	Prepare materials/equipment for issue			-	-	-
29.6.2.2	Identify and brief team			-	-	-
29.6.2.3	Apply issue restrictions			-	-	-
29.6.2.4	Recover materials			-	-	-
29.6.3	Status of field teams/materials					
29.6.3.1	Monitor transport of material			-	-	-
29.6.3.2	Monitor transfer of material			-	-	-
29.6.3.3	Monitor field storage of material			-	-	-
29.6.3.4	Monitor installation of materials			-	-	-
29.6.3.5	Inspect secondary level TDIs			-	-	-
29.7	Equipment configuration	TO 31X8-2-2-1				
29.7.1	Install/remove LEP			-	-	-
29.7.2	Activate reset tamper mechanism and install/remove MCU From panel			-	-	-
29.7.3	Install/remove MCU in MCU encoder drawer			-	-	-
29.7.4	Degauss/destroy media			-	-	-
29.7.5	Install/remove CSD(G) test adapter			-	-	-
29.7.6	Install/remove CSD(G)			-	-	-
29.7.7	Install/remove LCP test adapter			-	-	-
29.7.8	Install/remove P Plug test adapter	TO 31X8-2-2-2		-	-	-
29.7.9	Install/remove KVP test adapter	TO 31X8-2-2-2		-	-	-
29.7.10	Install/remove media			-	-	-
29.7.11	Load/adjust/unload printer paper			-	-	-
29.7.12	Load/remove printer ribbon cartridge			-	-	-
29.7.13	Install/remove KVP test adapter			-	-	-
29.7.14	Erase DTU memory			-	-	-
29.8	Equipment checkout	TO 31X8-2-2-1				
29.8.1	Perform DTU self-test			-	-	-
29.8.2	Perform CCV self test			-	-	-
29.8.3	Perform DTU self-test/preparation for load			-	-	-
29.9	Equipment malfunctions	TOs 31X8-2-2-1, 31X8-2-2-2				
29.9.1	Perform corrective actions			-	-	-
29.9.2	Perform WCPS emergency shutdown			-	-	-
29.9.3	Perform encryption emergency operations			-	-	-
29.1	Shielded enclosure	TO 31X8-2-2-1				
29.10.1	Perform SE visual inspection			-	-	-
29.10.2	Perform SE fire alarm test			-	-	-
29.10.3	Perform SE environmental test			-	-	-
29.10.4	Perform SE air pressure and door seal test			-	-	-
29.10.5	Perform SE communications test			-	-	-
29.10.6	Perform UPS remote panel inspection			-	-	-
29.11	WCPS power	TO 31X8-2-2-1				
29.11.1	Boot-up WCPS - normal start procedure			-	-	-
29.11.2	PVS key change/reload			-	-	-
29.12	CCOS executive functions. Perform:	TOs 31X8-2-2-1, 31X8-2-2-2				

29.12.1	Computer subsystem test			-	-	-
29.12.2	CRT/keyboard terminal test			-	-	-
29.12.3	Power supplies/ADC test			-	-	-
29.12.4	Disc assembly test			-	-	-
29.12.5	Line printer test			-	-	-
29.12.6	Isolation circuit test			-	-	-
29.12.7	Digital clock test			-	-	-
29.12.8	KIV-7M/modem comm link test			-	-	-
29.12.9	P-Plug adapter test			-	-	-
29.12.10	MCU encoder test/MCU certification test			-	-	-
29.12.11	LCP interface test			-	-	-
29.12.12	LEP adapter panel interface test			-	-	-
29.12.13	CSD(G) interface test			-	-	-
29.12.14	System/KS-60 interface test			-	-	-
29.12.15	CCV interface test			-	-	-
29.12.16	BS/L test			-	-	-
29.12.17	FDD test			-	-	-
29.12.18	CD-RW interface test			-	-	-
29.12.19	External KS-60 interface test			-	-	-
29.12.20	SKL interface test			-	-	-
29.12.21	Execute all Self-Test			-	-	-
29.12.22	End item load			-	-	-
29.12.23	Display equipment status			-	-	-
29.12.24	Display/reset log file			-	-	-
29.12.25	Pack data disc			-	-	-
29.12.26	Prepare new data disk			-	-	-
29.12.29	Receive data via link			-	-	-
29.12.28	Edit link control files			-	-	-
29.12.29	Perform manual record keeping			-	-	-
29.12.30	Relog (change operator)			-	-	-
29.12.31	Verify CD copies			-	-	-
29.12.32	Select commanded overwrite			-	-	-
29.12.33	Perform media to media conversion			-	-	-
29.12.34	Perform console shutdown			-	-	-
29.12.35	Backup system disk			-	-	-
29.12.36	Format disc in data drive			-	-	-
29.12.37	Load WCPS key CD			-	-	-
29.13	Accomplish master data control (WMAP)	TO 31X8-2-2-1				
29.13.1	Load A and B Code CDs			-	-	-
29.13.2	Load pen data			-	-	-
29.13.3	Assign pen data to LF			-	-	-
29.13.4	Display master data			-	-	-
29.13.5	Load/delete P-Plug data			-	-	-
29.13.6	Load/replenish REACT I code data			-	-	-
29.13.7	Load LF I code data			-	-	-
29.13.8	Prepare end item CDs (media)			-	-	-
29.14	Establish support data	TO 31X8-2-2-1				
29.14.1	Load execution plan			-	-	-
29.14.2	Load OGP/OFP data			-	-	-
29.14.3	Load MGS parameter data			-	-	-
29.14.4	Load REACT support data			-	-	-

29.14.5	Load LF master data			-	-	-
29.14.6	Load flight program constant data			-	-	-
29.15	Generate and verify data (WMAP)	TO 31X8-2-2-1				
29.15.1	Complete load LFLCD			-	-	-
29.15.2	Code change LFLCD			-	-	-
29.15.3	Pen D LFLCD			-	-	-
29.15.4	Wing code backup disk (system/data)			-	-	-
29.16	Encode and verify devices (WMAP)	TO 31X8-2-2-1				
29.16.1	Encode and verify LEP			-	-	-
29.16.2	Encode and verify LCP			-	-	-
29.16.3	Encode and verify CCV			-	-	-
29.16.4	Perform CCV trace data functions			-	-	-
29.16.5	Verify CSD(G)			-	-	-
29.17	Data verification	TO 31X8-2-2-1				
29.17.1	Perform launch verification			-	-	-
29.17.2	Verify LEP			-	-	-
29.18	Verify only data functions	TO 31X8-2-2-1				
29.18.1	Verify complete load LFLCD			-	-	-
29.18.2	Verify code change LFLCD			-	-	-
29.18.3	Verify Pen D LFLCD			-	-	-
29.19	Media ID data	TO 31X8-2-2-1				
29.19.1	Display Part A/Part B CD ID data			-	-	
29.19.2	Display master code CD ID data			-	-	-
29.19.3	Display LCF BS/L HAD ID data			-	-	-
29.19.4	Display LCF diskette ID data			-	-	-
29.19.5	Display LFLCD ID data			-	-	-
29.19.6	Display key CD ID data			-	-	-
29.2	Load and verify devices	TO 31X8-2-2-1				
29.20.1	Initialize LCF BS/L HAD			-	-	-
29.20.2	Load/verify LCF BS/L HAD			-	-	-
29.20.3	Load/verify LCF diskettes			-	-	-
29.20.4	Perform transfer of LFLCD files to DTU			-	-	-
29.21	Respond to invalid sum check	TO 31X8-2-2-1				
29.21.1	Validate CMSC/Perform CMSC backout procedures			-	-	-
29.21.2	Validate VN/respond to unsuccessful VNs			-	-	-
29.22	KS-60 Management					
29.22.1	Manage wing pool data			-	-	-
29.22.2	Assign HICS KS-60 key to squadron			-	-	-
29.22.3	Load external KS-60			-	-	-
29.22.4	Load black KS-60 keys in SKL			-	-	-
29.22.6	Unload KS-60 trace data from SKL			-	-	-
29.22.7	Perform SKL audit data operations			-	-	-
29.23	Administrative communications management	AFI 10-1102, 31-401, AFMAN 33- 326, AFKAG-3H, EAP-STRAT VOLUME 16, AFGSCI 13-5301V5				
29.23.1	Process, protect, and destroy classified information			-	-	-
29.23.2	Apply classification markings			-	-	-
29.23.3	Handle/store/account for classified materials			-	-	-
29.23.4	Document/package/process package for courier/classified shipments			-	-	-